

SYNOPSIS OF THE RESULTS OF THE OPERATIONS OF

THE GREAT TRIGONOMETRICAL SURVEY OF INDIA

VOLUME XXXI

DESCRIPTIONS AND CO-ORDINATES

OF THE

PRINCIPAL AND SECONDARY STATIONS AND OTHER FIXED POINTS OF

THE KHAPISURA MERIDIONAL SERIES

OR SERIES G

OF TIE

SOUTH-WEST QUADRILATERAL.

PREPARED IN THE OFFICE OF THE TRIGONOMETRICAL BRANCH, SURVEY OF INDIA, COLONEL G. STRAHAN, R.E., DEPUTY SURVEYOR GENERAL, IN CHARGE.

COLONEL H. R. THUILLIER, R.E., SURVEYOR GENERAL OF INDIA.



Debra Dun:

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CHART

ERRATA ET ADDENDA.

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31__a in cel. 3, at Kanad h.s., azimuth of Andaner Peak for 171° 16' 32"

read 187° 0' 32"

42_G. The height 2243 74 feet of Anakvadi, XXV, refers to the mark-stone in the upper surface of the platform.

47 $_{-G}$. The height 1164 81 feet of Dhanvár, XXIV, refers to the mark-stone in the upper surface of the platform.

February, 1893.

J. ECCLES,

In charge of Computing Office.

REFERENCES.

The abbreviations employed in the text are as follows:-

h.s. denotes hill station (secondary),

. , station

These abbreviations are only placed after stations where a theodelite has been set up and observations taken to surrounding points.

The latter exhibits numerical values of triangles only to points of a superior class, to which alone, if exhibited on the Chart, lines are drawn: the lines are either continuous throughout, or dotted for half the length and continuous for the other half: the dots indicate that the hearing was not observed. For other points difficult to identify or of comparatively less accuracy, numerical values of triangles and azimuths are not given.

February, 1893.

J. ECCLES,

In charge of Computing Office.

PREFACE.

The Khanpisura Meridional Series, the details of which are given in this volume, forms one of the internal chains of the South-West Quadrilateral, or that section of the triangulation of India which lies between parallels of 15° and 25° and between the meridian of 75° and the Arabian Sea. The general principles of the simultaneous reduction, and the precedure followed in carrying it out, are explained in Volume II of the Account of the Operations, &c.; and full details of the whole of the principal triangulation appertaining to the Quadrilateral will be found in Volume XIV of the Account of the Operations, &c.

As however the entire contents of the volumes of the principal triangulation are not needed by geographers and surveyors, and moreover as these volumes give no details of the secondary triangulation—which is of considerable value for local requirements—it is obviously desirable that synopses of the final results of the whole of the operations, including the secondary as well as the principal triangulation, should be published for general use in such a form as to be most suitable for convenience of reference. This has already been done as follows:— For the several Series forming the North-West Quadrilateril,

J. Great Indus Series.

II. Great Arc, Section 21° to 30°.

III. Karachi Longitudinal Series.

IV. Gurhágarh Meridional Series.

V. Rahun Meridional Series.

VI. Jogi-Tila and Sutlej Series.

VII. North-West Himalaya Series.

VII A. Jodhpore and Eastern Sind Meridional Series.

For those forming the South-East Quadrilateral,

VIII. Great Arc, Section 15° to 21°.

IX. Jabalpur Meridional Series.

X. Bider Longitudinal Series.

XI. Biláspur Meridional Series.

XII. Calcutta Longitudinal Series.

XIII. East Coast Series.

XIII A. South Parasnath and South Malancha Series.

Already published.

Already published.

For those forming the North-East Quadrilateral,

XIV. Budhon Meridional Series.

XV. Rangir Moridicual Series.

XVI. Amua and Karára Meridional Series.

XVII. Gurwáni and Gora Meridional Series.

XVIII. Huríláong and Chendwar Meridional Series.

XIX. North Párasnáth and North Malúncha Meridional Series.

XX. Calcutta and Brahmanutra Meridional Series.

XXI. East Calentta Longitudinal and Eastern Frontier Series, Section 23° to 26°.

XXII. *Assam Valley Triangulation, E. of Moridian 92°.

For the following Series of the Southern Trigon, viz.,

XXIII. South Konkan Coast Series.

XXIV. Mangalore Moridional Series.

XXV. South-East Coast Series.

XXVI. Bombay Longitudinal Serios.

XXVII. Madras Longitudinal Series.

XXVIII. Madras Moridional and Coast Series.

XXIX. Great Are, Section 8° to 18°. (In press).

And for the following Series of the South-West Quadrilateral:-

XXX. Abu Meridional and Gujarát Longitudinal Series. Already published.

The present is the 32ud Synoptical Volume in order of publication, and the second of these appertaining to the South-West Quadrilatoral; it gives the results both of the principal triangulation executed exclusively with theodelites having azimuthal circles of 15 and 24 inches in diameter, read by three and five micrometer microscopes respectively, and of the secondary triangulation in which other instruments besides the 15-inch theodelite were used.

By the process of reduction which has been followed, the principal triangulation has been rendered perfectly consistent both internally and externally; internally, so that if in any one of the several polygonal figures of which the chains may be composed, calculations are carried from one station to another in every possible direction, the same results will be inevitably deduced; and externally, so that the values of the co-ordinates of any station, when computed from the given co-ordinates of any other station, with the final linear and angular data, will be the same, whether the calculation is carried directly through the Series, or circuitously through any of the other chains of triangles comprising the South-West Quadrilateral. All secondary triangulation emanating from one side of the principal Series and closing on another side thereof, or on a contiguous Series, have also been made consistent throughout.

As regards the general arrangement of this volume, it may be pointed out that the Introduction to the Series was originally prepared for Volume XIV of the Account of the Operations, &c., and when a sufficient number of copies had been printed for that work, additional copies were struck off for this volume. The Introduction gives a historical and descriptive sketch of the progress of the whole operations in the field—both principal and secondary—from year to year, mentions the Officers by whom they were conducted, the theodelites with which principal angles were measured, and indicates the work done by each of the Assistants. The adjustment of the secondary triangulation was taken in hand in the year 1892, and completed in the same year when the printing of the volume was resumed.

The data given in this volume are the following:-

First (page 1_{-G}), an alphabetical list of the names of the principal stations, showing the numbers assigned to them.

Second (page 2_{-G}), a numerical list giving the names corresponding to the numbers. Third (page 3_{-G}), descriptions of the structure and positions of the principal stations. Fourth (page 12_{-G}), the angles and sides of the principal triangles.

^{*} This is an offshoot of the Assam Longitudinal Series, and falls entirely outside of the limits of the North-East Quadrilateral. The volume is issued in a preliminary form, and therefore only a limited number of copies are available to meet any immediate demand for data: the final publication will be hereafter made on the completion of the triangulation in Burma, into the general reduction of which this Series will onter.

PREFACE. ix

Fifth (page 16—a), the angles and sides of certain secondary triangles. The numbering is here made consecutive to that of the principal triangles, in order to facilitate references which are made in other sections to the place where the length of a side is to be found.

Sixth (page 30.—a.), the azimuths of surrounding stations and points at principal, principal-auxiliary and secondary stations, the latter arranged in alphabetical order.

Seventh (page 41-g.), the co-ordinates and descriptions of all stations and points arranged in alphabetical order.

It has not been considered necessary to publish the whole of the details of the secondary triangulation; the sides and angles of 304 triangles, which were selected as most likely to be of future use, and the azimuths of all these sides, have been given; but for a number of other points the co-ordinates only have been given. With the aid of Tables Nos. XXVI, XXVII, XXVIII, XXIX and XXX of the Auxiliary Tubles to facilitate the calculations of the Survey of India, Dehra Dun, 1887, surveyors, working on a system of rectangular co-ordinates, can readily transform the spheroidal co-ordinates here given to suit their requirements.

The heights above mean sea level of the stations depend on the final trigonometrically determined values of Būda and Bālāgara stations of the Karáchi Longitudinal Series of the North-West Quadrilateral and on the spirit-levelled value of Agargaen station of the Bombay Longitudinal Series of the Southern Trigon, and are further controlled by lines of spirit-levelling crossing the Series. All particulars regarding the heights will be found detailed ou page 41—a, as well as in the footnetes to the subsequent pages.

The longitudes depend on an astronomically determined value of the longitude of the Madras Observatory, deduced about the year 1815. The longitude of the Madras Observatory has however been re-determined by the Electro-Telegraphic method, from observations made at Greenwich, Mokattam (in Egypt), Suez, Aden, Bombay and at certain stations of the triangulation in India.

This value of the lengitude of the Madras Observatory is equivalent to 80° 14′ 51″ E.; and as the originally adopted value, on which the longitudes of the whole of the stations of this Survey are based, is 80° 17′ 21″ E.—see page 135 of Volume II of the Account of the Operations, &c.—the following precept may be accepted with considerable confidence:—

All the values of longitude in this volume require a constant correction, probably of -2'30'.

The orthography of Indian names in the present volume is in accordance with the provincial lists of spellings constructed under the immediate orders of the Government of India. The newly authorised spellings were adopted for all names and other words contained in these lists; but for words for which there was no specific authority, the spellings have been framed in accordance with the methods followed in the preparation of the published lists, reference being made in the present instance more particularly to the Gazetted Lists for the Bombay Presidency, Nizam's Territory and Central India Agency. As a general rule the prenunciations of the vowels are as follows:—a has a variable sound as in woman, rural, paltry; á as in tartan; i as in bit; i as in ravine; u as in bill; ú as in rural; o as in note; e as a in say; au as ou in cloud; ai as i in ride. Final vowels and those in well-known terminals are unaccented. When the popular spelling of a name has been accepted by Government, its correct orthography is generally given in parenthesis where the name occurs for the first time.

The chart accompanying this volume shows all the principal stations and triangulation, the positions of all secondary points, and those portions of the secondary triangulations of which full details of the nngles, sides and azimuths are given. With the aid of the chart it is hoped that little difficulty will be mot with in finding out any of the data which may be required. The descriptions of the secondary stations and points are in some cases not as full and clear as might be desired: this arises from the inadequacy of the information entered on the spot by the surveyors in their field books; every effort has been made to supplement the field books, whenever it was found practicable to do so, in order to facilitate the future identification of the stations, and all the information which is forthcoming has now been given.

The general arrangement of the volume is in accordance with that adopted in previous Synoptical Volumes. The data which it contains have been propared chiefly under the superintendence of Mr. J. Eccles, MA., Deputy Superintendent, the Officer in charge of the Computing Office. The Introduction to the Series was written by Captain S. G. Burrard, Deputy Superintendent. The volume like its predecessors has been printed at the Trigonometrical Branch Office at Dehra; Mr. Peychers has rendered valuable service in the examination of the press proofs generally, and more particularly in regard to the preparation and final revision of the letter press and numerical details which require the utmost care, and in this respect from his natural aptitude and experience his assistance has been most valuable.

Dehra Dun, February, 1899.

G. STRAHAN, COLONEL, R.E.,

Dy. Surveyor General,

In charge Trigonometrical Surveys.



KHANPISURA MERIDIONAL SERIES.

INTRODUCTION.

The Khánpisura Meridional Series of the South-West Quadrilateral is the great chain of principal triangles that follows the meridian of $75\frac{1}{3}^{\circ}$ from the parallel of 19° to that of $24\frac{1}{4}^{\circ}$. Its southern extremity is in the dominions of the Nizam, and it passes through Khándesh and Central India. It consists of one compound figure, two double and two single polygons, and four quadrilaterals, and extends over a meridional distance of 360 miles. Its name is derived from the station of Khánpisura of the Bombay Longitudinal Series.

The series lies between the side Búda (xxI)—Bálágara (xxIV) of the Karáchi Longitudinal Series and the side Chineholi (xxIII)—Ágargaon (xxIV) of the Bombay Longitudinal Series. In the simultaneous reduction of the South-West Quadrilateral, it had therefore to be fitted in between a finally fixed side of the North-West Quadrilateral and another of the Southern Trigon: on the completion of this reduction it was found that the errors which had actually been dispersed between the two fixed terminals were as follows:—

In Latitude of Ágargaon	r (xxia)	•••	•••	***	_	o"635
" Longitude of "	"	•••	•••	•••		0.266
" Azimuth of Ágargaon	ı (xxiv)-	–Chineholi	i (xx11	ı)	_	7.808
In side Logarithm of feet giving a ratio of	 about 2	 78 inches I	 er mi	 le.	+	0.000,0190,3

Observations for the direct determination of azimuth have been taken at two stations of the Khánpisura Meridional Series, viz., Valvádi and Indrawán.

In 1845 when the North Konkan or Singi Series had been carried as far north as the parallel of 21° 45′, it was found necessary to temporarily abandon it, as the health of the party had suffered so terribly in its execution. Lieutenant Harry Rivers of the Bombay Engineers, the Officer in charge, was accordingly directed in October, 1845, to start a new

series of triangulation from a side of the Bombay Longitudinal Series and carry it due north along the meridian of 75°.

The sides of the old Bombay Longitudinal Series that Rivers adopted as bases for

Season 1845-46.

PERSONNEL.

Lieutenant H. Rivers, Bombay Engineers, 2nd Assistant G. T. Survey. Mr. J. Fraser, Sub-Assistant 1at Class.

" T. Sanger,
" J. DaCosta, 2nd Class.

the new chain were Parner-Khanpisura and Khanpisura-Sautára*, and the first stations he selected were those of Agargaon and Chineholi. By the end of December 1845 he had comploted the triangulation up to the side Dhaigaon-Mathuri, and by the middle of January he had by means of two new single triangles reached Yerúl-

On this latter side he constructed a pentagon, round Popula as a centre which Jamkhed. advanced the triangulation as far north as Sátmála-Sirsála. He then proceeded to Surat to take some observations at stations of the Singi Meridional Series, which he had had to relin. quish the previous year, and he was occupied with these till the close of the field season,"

In the Introduction to the Singi Meridional Series an account is given of the great difficulties that Lieutenant Rivers encountered in the execution of that Series, and of his repeated failures to extend it through the Dáng jungles; he had in fact been unable to carry it north of the parallel 21° 45', and at this point it was now standing in abeyance.

In the summer of 1846 Rivers proposed to Sir Andrew Waugh to connect the Singi and Khanpisura Series in latitude 20° 30' by means of three single triangles, one on the side of the Khanpisura Series, Sirsála-Sátmála, one on the side of the Singi Series, Ankai-Sáler, and one between, and to convert the two present Meridional Series from this point northwards into one on the meridian of 74° 45': this new series he explained would run through Khándesh and Malwa (Málwa), where there were a succession of hills, which they had not the benefit of in the plains of Gujarát, and which moreover did not extend sufficiently to the east to allow of being utilised for the Khanpisura Series: the atmosphere too would be more favorable for trigonometrical work, being higher and further from the haze of the coast. Sir Andrew Waugh, who still believed in the feasibility of extending the Singi Series, refused to sanction Rivers' proposal on the grounds that it was not in keeping with the system of the Indian triangulation, and directed that both Moridional Series should be kept distinct and unconnected. The party passed the recess season of 1846 at Poona.

On October 9th, 1846, Rivers began observing an astronomical azimuth at Khánpi-Season 1846-47.

PERSONNEL.

Licutenant H. Rivers, Bombay Engineers, 2nd Assistant G. T. Survey. Mr. J. Fraser, Sub-Assistant 1st Class.

T. Fanger, 2nd Class.

J. DaCosta,

sura, which was not completed till October 21st, owing to cloudy and boisterous weather. He then re-observed the angle at Parner between Khanpisura and Agargaon and also that at Khanpisura between Parner and Agargaon, as they had been taken before on but three pairs of zerost. The next stations he visited were Sirsala and Satmala,

^{*} The three northern triangles of the Khanpisura Heptagon appertained originally to the Khanpisura Meridional Series; the whole Heptagon is now included in the Bombay Longitudinal Series, and consequently belongs to the Southern Trigon.

† These measures were not utilized in the calculation.

which are situated on the northern edge of the Ajanta range of gháts and from which a clear view to the north ean be obtained all the way to the Sátpuda range. From these stations, at each of which two angles remained to be observed, a further extension of the Khánpisura Series was commenced. After leaving Valvádi, where he had observed an astronomical azimuth, the country became very desolate; there were no villages and no roads, and dense jungle lay in every direction.

At Thikri a letter arrived from Mr. Sanger, who was in charge of the approximate work, reporting that he had great difficulty in selecting a strong and suitable figure immediately to the north of the parallel of 22°, owing to the country in the Malwa Districts being a perfect plain. Leaving the theodolite and the greater part of his eamp at Thikri, Rivers pushed on in advance to help his assistant; after three weeks hard work he succeeded in laying down an excellent figure, the Mograba Hexagon, and returned to Thikri to resume the observations of the principal angles. By the middle of April, 1847, he had earried the Khánpisura Series as far north as the side Harnása-Indrawán, and at the latter station had observed an astronomical azimuth. He arrived at Mhow (Mau) shortly before May 1st, where he established his recess quarters.

As Rivers' series was now approaching the parallel of Kaliánpur and Sironj the

2nd Class.

Season 1847-49.

PERSONNEL.

Lieutenant H. Rivers, Bombay Engineers, 2nd Assistant G. T. Surrey. Mr. J. Fraser, Sub-Assistant 1st Class. ", T. Sanger,
", J. DaCosta,

selection of his stations became a matter of more than ordinary difficulty: preparations were already being made for extending the Great Longitudinal Series along this parallel westwards to Karáchi, but the exact latitude in which it would strike the Khanpisura Meridian could not be foreseen. Rivers was told to so select his figures, be-

tween the parallels of 24° and 25°, that any one of them if necessary should admit of being adopted in the new Longitudinal Series. On taking the field in October, 1847, Rivers himself commenced the approximate work, which he found a most difficult task: all his triangles had to admit of satisfactory extensions not only to the north, but also to the east and west, and as there were no commanding hills it was often necessary to make a minor triangulation simply to obtain the direction of the points already determined. Under these circumstances Rivers thought it his best plan to undertake himself the approximate work of the new Longitudinal Series and earry it on simultaneously with that of his own chain. He therefore decided to select the stations on the Khánpisura Meridian as far north as the parallel of 24° and to then work along that parallel to Sironj. He had just completed the selection of the stations for the Aramlia Polygon, and was about to proceed to Sironj, when he received orders to earry the Khánpisura Series due north to Ajmere (Ajmor) and to leave the longitudinal eonnection with Sironj to be taken up by another officer. He earried the approximate work up to the parallel of 25° and then commenced the final observations working southwards from the northernmost stations. The Great Longitudinal Series eventually struck the Series under review in the latitude of Aramlia, but Rivers' polygon around that station proved unsuitable and another had to be selected. The former, however, together with Rivers' work to the north of it, was included in the Aramlia (now the Gurhágarh) Meridional Series, whilst the

side connecting the stations of Bálágara and Búda, which was common to both was made the northern boundary of the Khanpisura Meridional Series. By the end of March, 1848, Rivers had carried the principal work southwards as far as the stations of Dhamnar and Sitaman, and in April he completed the observations at Lohari and Dudhala: at Nigrun, however, though he halted a week, he could not see the Deo Dongri signal, which had been easily visible in November. At Deo Dongri too he was unable to observe Nigrun. At Gurla he met with no better success, though, owing to the shortness of the rays, all the surrounding heliotropes were visible, and at Karsod the Indrawan station could not be made out though large fires were lighted at night, and though the signal had been seen by Mr. Sanger in October. Finding it thus impossible to complete the connection with the side Harnésa-Indrawan of his former season's work, he closed the field season at Karsod on May 5th; He had dismantled and packed the instrument, and it was ready to be moved, when during the night one of the boxes was broken open and the telescope and vertical circle were carried off by thieves. They were found next morning in a ditch 300 yards from camp; they were both uninjured but the eye-piece was missing. Rivers arrived at Mhow where he had. established his recess quarters on May 15th.

Rivers re-commenced operations the following winter: the first station visited was

Season 1848-49.

PERSONNEL.

Lieutenant H. Rivers, Bombay Engineers, 2nd Assistant G. T. Survey. Mr. J. Fraser, Sub-Assistant 1st Class. T. Sanger,

J. DaCosta

2nd Class.

Indrawán which he reached on November 17th, and from thence he went to Karsod. By the end of the year 1848 he had completed the connection between the northern and southern sections, and the Principal Triangulation of the Khanpisura Meridional Series was finished. then proceeded towards Neemuch (Nimach) and took up

The instrument employed by Lieutenant Rivers on the the work of the Gurhágarh Series. Khánpisura Series was the same 15-inch Theodolite by Dollond that was used on the southern section of the Singi Sories.

Season 1862-63,

PERSONNEL.

Captain C. T. Haig, R.E., 1st Assistant. Mr. DaCosta, Assistant. J. McGiil, Civil 2nd Assistant. G. Anding, Sub-Assistant, J. E. Donohoe, 3rd Class Sub-Assistant.

The Khanpisura Series as left by Rivers, though otherwise double throughout, was weakened near its southern extremity by the existence of two single triangles, viz., Mathuri, Dhaigaon, Jámkhed and Yerúl, Dhaigaon, Júmkhed. In November 1862, Captain Haig, R.E., who was in charge of the Bombay Party and who was about to undertake the Triangulation of the Mangalore Meridional Series, set out from Poona (Puna)

with the object of strengthening the single portion of the Khanpisura Series. he obtained by the adoption of but one new station that of Ahirmal, which with Mathuri Jamkhed and Rajur gave two new triangles and thus completed a double polygon round Jamkhed and Pophla. Mathuri, the first station visited was reached on November 10th, 1862 and all the observations necessary at the four stations were completed on December 7th. The instrument he used was that known in the Survey Department as Barrow's 24-inch Theodolite No. 2.

In consequence of the great deficiency of observations on certain rays and of the weak character of the heights in general, the re-measurement of all the vertical angles of Rivers' section of the Khánpisura Series was found necessary. In 1882-83, Mr. A. Christie, Surveyor 4th grade, began this revision from the side Bálágara-Búda of the Karáchi Longitudinal Series, and worked southwards as far as Jalálabad and Bábákuvar. In November 1883, Mr. H. E. T. Keclan, Surveyor 3rd grade, was directed to commence at the southern extremity of the Series, Ágargaon and Chineholi, and to work northwards so as to close on Mr. Christie's work of the previous year. Unfortunately at Ágargaon Mr. Keclan was attacked with severe inflammation of the right eye, which obliged him to return to Ahmednagar (Ahmadnagar) for medical aid; he was compelled to take privilege leave till January 15th, and consequently lost two months in the best part of the season. This interruption made it impossible to complete the revision of the heights in the field season of 1883-84, and Mr. Keclan had to resume work on it the following year, when the remeasurement of all the vertical angles was finished.

In 1868-69, Lieutenant W. J. Heaviside, R.E., visited the stations of Deo Dongri and Harnása, and in the following year those of Valvádi and Dhaigaon, and at each of the four observed an astronomical latitude.

Secondary Triangulation.

On the southern part of the Khánpisura Meridional Series, as far north as the River Tápti, an unusually large number of secondary points were fixed by Rivers: the majority of these were intersected pagodas, forts and trees, but there were several secondary stations too, that were visited and observed at: the positions of the towns of Ahmednagar, Dhulia (Dhula) and Aurungabad were determined. The principal station of Ankai of the Singi Series was observed both from Sátmála and Yerúl.

Between the Tapti and Narbada there were no prominent pagodas to observe and no important towns to be fixed and consequently the secondary work was very scanty, consisting of only some ten intersected points in all.

Between the Narbada and the northern terminus of the Series the country was a desolate desert, and but few opportunities offered of executing secondary work: the town of Dhár was the only place of importance that the Series passed over. From the side Harnása—Singárehori a small secondary series was run to the eastwards, which fixed numerous points in the cities of Indore (Indor) and Mhow and which ended at the town of Dewás.

S. C. BURRARD.

April, 1889.



KHANPISURA MERIDIONAL SERIES.

PRINCIPAL TRIANGULATION. ALPHABETICAL LIST OF STATIONS.

							•								
Agargaon	•		. ;	(ortis)	i. Lelay	To egit	XXIV.	Indráwan	•	•	•	•	•	•	XIII.
Ahirmal						•	XXXII.	Jalálabad			•		•	•	XIX.
Ajnád		•	•	•	•		XXII.	Jalálkheri		•	•	•		•	X.
Anakvádi	•		•	•	•		XXV.	Jámkhed		•	•	•	•	•	XXXI.
Árgaon		•	•			•	XXI.	Karsod	•		•	٠			IX.
Bábákuvar	•	•				•	XX.	Kaula-ka-M	úta	•	•	•	•		XI.
Billigara	•	•	•	(at ibs	Karl-11	L m	XXIV.	Lohári	•	•	•	•	•	•	VI.
Báwangai	•	٠					XVIII.	Mathuri		•	•		•	•	XXXIII.
Búda	٠	•	•	(ed 15.5)	ga jiri	1, · ; :	XXI.	Mograba	•	•	•	•	•	•	XIV.
Chincholi	•	•	•	(១) ពីក	ll-mlu)	₽÷;	XXIII.	Nigrun	•	•	•	•	•	٠.	111.
Deo Dongri	•	•	•			•	v.	Poplila	•	•	•	•	•	•	XXVIII.
Dhaigaon	•	•	•	•	•		XXXIV.	Rájur	•	•	•	•	•	• ,	XX1X.
Dhamnár	•	•		•	•	•	II.	Sátmála		•	•	•	•	•	XXVII.
Dhanora	•	•	•	•	•	•	VII.	Singárchori	•	•	•	•	•	•	XV.
Dhanvár	•	٠		•	•	•	XXIV.	Sirsila		•	•	•	•	•	XXVI.
Dudhála	•	•	•			•	IV.	Sitaman	•			•	•	•	I.
Gumánpur	•	•	•	•		•	ZVI.	Thikri	•	•	•	•	•	•	· xvii.
Gurla	•	•	,	•	•		VIII.	Valyádi	•	•	•	٠	•	٠	XXIII.
Harnása	•		•	•	•	•	XII.	Yerúl	•	•	•	•		•	XXX.

KHANPISURA MERIDIONAL SERIES.

PRINCIPAL TRIANGULATION. NUMERICAL LIST OF STATIONS.

										•					
XXI (Of the K	ráchi I	ongitud	lınal Ser	109)	•		Búda.	XVIII			•	•			· Báwanga
XXIV (Of the Kr	ráchi I	ongitud	lınal Ser	108)	•	•	Bálágara.	XIX	•	•	٠	•		•	Jalálabad
I	•	•			•		Sítamau.	XX							Bábákuva
II	•	•	•	•	•	•	Dhamnár.	IXX			•				Árgaor
III		•					Nigrun.	XXII	•		•	•			Ajnác
IV					•	•	Dudhála.	XXIII	•			•			Valvádi.
v		•	•		:		Deo Dongri.	XXIV	•		•		•	•	Dhanvár.
VI		•	•		•	•	Lohári.	xxv			•				Anakvádí
VII		•	•				Dhanora.	XXVI							Sirsála.
VIII	•		•	•.	•		Gurla.	XXVII.					•	•	Sátmála
$\mathbf{I}\mathbf{X}$							Karsod.	IIIVXX		٠					- Pophla,
X		•					Jalálkheri.	XXIX							Rájur.
\mathbf{x}					•		Kaula-ka-Máta.	$\cdot xxx$			•				Yerŵ
XII		٠.					Harnása.	XXXI							Jámkhed.
XIII				•			Indráwan.	XXXII					•		Áhirmal
XIV			•				Mograba.	IIIXXX			•	•			· Mathuri
XV							Singárchori.	XXXIV .		`.					Dhaigaon
XVI	•	•	•	•	•		Gumánpur.	XXIII (Of the Bendar	Long	tudinal	Strica)	•	•	•	Chincholi
XVII	•	•	•	•	•	•	Thíkri.	XXIV (Of the Bombay	Longi	tudinal	Scries)			· .	Agargaon
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KHANPISUBA MERIDIONAL SERIES.

PRINCIPAL TRIANGULATION, DESCRIPTION OF STATIONS,

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XXIV.—(Of the Karáchi Longitudinal Series). Bálágara (Bálagarra) Hill Station, lat. 24° 10′, long. 75° 0′—observed at in 1848 and 1850—is situated on the north-eastern of a group of small, isolated hills, about a mile N.E. of the village of Bálágara, and 3 miles W. of the high road from Neemuch to Indore. The hill, on which the station is, rises about 120 feet above the general level of the country, and is a mile in circumference at base. The station is in the lands of the village of Bálágara, pargana Mandsaur, Gwalior torritory.

The station as originally built in 1848 consisted of a platform of loose stone masonry, having a mark-stone at the top and another 3·19 feet below engraved on the rock in sitä: When visited in 1850 in the course of the Karachi Longitudinal Series operations, it does not appear that any alteration in the construction of the station was made. In 1868-69, the mark on the rock was found and the platform, 3 feet in height, consisted of loose stone masonry. In the visit of 1882, the station was found unaltered and in good preservation; the surrounding platform being of stones and earth 18 feet square. The directions and distances of the circumjacent villages are:—Bai E., miles 1½; Dungloda S. by E., miles 1½; Narona N. by E., miles 2; Khera N.E., mile 1; and Kankri N.W., miles 14.

I. Sitamau Hill Station, lat. 24° 2′, long. 75° 22′—observed at in 1848—is situated 1½ miles N.W. of the town of Sitamau, near the centre of a small, flat-topped hill rising some 50 feet above the level of the country, and somewhat conspicuous as being the only wooded hill in the neighbourhood; it is about 20 feet higher than the ridges and spurs with which it is connected. The station is in the lands of the village of Murkhera, Sitamau State, Western Malwa Agency.

The station consisted of a platform of loose stone masonry and contained three marks, the upper two being 5.35 and 8.89 feet respectively above one engraved on the rock at the ground level. It was visited by Lieutenant Heaviside in 1868-69, who stated that "The pillar had apparently not been disturbed." When again visited in 1882, the station was found to consist of an isolated pillar of stone and earth 12.84 feet high, without a mark on its summit, surrounded by a platform of loose stones 18 feet square. A mark-stone was inserted and both the pillar and platform raised by 2.58 feet, making the entire height of the pillar 15.42 feet. The directions and estimated distances of the circumjacent villages are:—Suriakheri N., mile 1; Murkhera W. by S., mile 3; Chikla E.N.E., miles 3½; and Sitamau (town) S.E., miles 1½.

II. Dhamnar Hill Station, lat. 23° 53′, long. 75° 12—observed at in 1848—is situated on the highest part of a low, flat-topped, isolated hill rising some 40 feet above the level of the surrounding country. The station is 616 feet N.E. of a high solitary tree, and 5 miles S.E. of the Railway Station of Dalauda: pargana Mandsaur, Gwalior territory.

The station consisted of a solid pillar of masonry which carried a mark at its surface level with the ground and another, fixed in the rock with mortar, 2 feet below. It was visited in season 1868-69 by Mr. J. Wood, who remarks "There is no platform built here, and the lower mark is 2½ feet below the surface of the ground." When again visited in 1882, the station was found to consist of a platform of earth and stones 1 foot high with a mark-stone in its upper surface. The directions and estimated distances of the circumjacent villages are:—Jamúnia E., miles 1½; Atunia E.N.E., miles 1½; and Yusufkhera W., mile ¾.

III. Nigrun Station, lat. 23° 46′, long. 75° 27′—observed at in 1818—is situated on the rising ground about 1½ miles S.E. of the village from which it is named, and 3½ miles N. of the town and post office of Tal: The station is in the lands of the village of Nigrun, pargana Tal, Jaora State, Western Malwa Agency.

The station consists of a solid pillar of masonry, about 5 feet in height, having marks at top and bottom 5.15 feet apart. The platform is built of loose stone masonry and carried to a height of 5.27 feet above the top of the solid pillar, the whole structure being 10.27 feet high. When visited in 1882, the platform and a mark-stone in its upper surface were found in good preservation. The directions and distances of the circumjacent villages are:—Pipalia N.E., miles 4; Naváni E.N.E., miles 5; Bagunia E. by S., miles 3; and Kachalia S.E., miles 4.

IV. Dudhála Hill Station, lat. 23° 51′, long. 75° 49′—observed at in 1848—is situated about 30 feet from the southern extremity of a laterite hill rising 100 feet above the level of the country. The top of the hill is flat, running off into wide spurs to N.W. and N.E. of the station, the southern face being rather precipitous. The town of Baraud lies 4½ miles to S. by E. of the station. The station is in the lands of the village of Dudhála, pargana Jhálra Pátan, Jhallawar Stato.

The station consists of a platform of loose stone masonry containing two marks, one at the surface 5.23 feet above the other. It was visited by Lieutenant Heaviside in season 1868-69, who remarks "The pillar had apparently not been disturbed". When again visited in 1882, the station and its upper mark-stone were found in good preservation. The directions and distances of the circumjacent villages are:—Atipura N.E. by E., miles 14; Kasankot E.S.E., miles 14; Khandwás S., mile 1; and Ratanpur W.S.W., mile 3.

V. Deo Dongri Hill Station, lat. 23° 27', long. 75° 35'—observed at in 1848—is at the junction of three walls on the southern side of the roof (11\frac{1}{4} feet above ground) of the large temple on a low hill at the northern extremity of the village of Deo Dongri. The village is near the centre of a small, isolated hill, about

800 feet in length at top, and rising about 70 feet above the general level of the surrounding country: pargana Unel, Gwalior territory.

The station consists of a solid pillar of masonry, about 2 feet high, containing a mark in the surface 2.92 feet above one imbedded in the masonry of the wall. The mark is 1.33 feet from the E. side and 1.25 feet from the S. side of the pillar. In March 1869 a protecting pillar of stone masonry, 2 feet square, was built over the mark-stone. When again visited in 1882, the station was found marked by a square pillar of stone masonry rising 2.7 feet above the stone roof of the temple. The azimuths and perambulated distances of the circumjacent villages are:—Mattra 326°, miles 1.2; Mo 356°, miles 1.6; Rattra 48°, mile 0.8; Medpur (the largest and most conspicuous temple) 250°, miles 7½ by estimation.

VI. Lohári Hill Station, lat. 23° 35′, long. 75° 8′—observed at in 1848—is situated on a low, flat-topped hill rising about 70 feet above the plain, appertaining to the villages of Lohári, Nagdi and Wairala. It lies about a mile E. of the railway line, and of the high road from Jaora to Rutlam. The station is in the lands of the village of Lohári, Jaora State, Wostern Malwa Ageney.

The station consisted of a platform of loose stones, about 6 feet in height, enclosing a central, solid pillar of masonry which had a mark in its surface and another 5.21 feet below. It was visited in 1869 by Lieutenant Heaviside, when no mark-stones were found and a heap of loose stones alone denoted the site of the station. When again visited in 1883, the station was found to consist of a platform of earth and stones $5\frac{1}{2}$ feet high with a mark-stone in its upper surface, but as this proved too low for observations to Deo Dongri Station, the platform was raised with an isolated pillar of earth and stones in the centre to a height of 13.4 feet above the ground level. The estimated directions and distances of the following villages are:—Lohári N., miles $1\frac{1}{2}$; Waraila S., mile 1; Sadakheri E.S.E., miles 2; and Nagdi E.N.E., miles $1\frac{1}{2}$.

VII. Dhanora Hill Station, lat. 23° 17′, long. 75° 18′—observed at in 1848—is situated on a table-land rising about 80 to 100 feet above the surrounding country, 1 mile N. of Laptia village, and 6 miles E. of the Railway Station of Naugauvan. It is in the lands of the village of Dhanora, Sailana State, Western Malwa Agency.

The station consisted of a platform of loose stone masoury, 12 feet in height, which had a mark-stone at top and another at the ground level. When visited in 1883, no mark-stones were found, on removing the central portion of the heap of stones an excavation, a few inches deep, like the foundation of a pillar, was met with at the ground level; in this a mark-stone was fixed and the platform rebuilt to a height of 9.3 feet, and over which an isolated pillar of earth and stones 1.4 feet high was built, carrying a mark-stone in its upper surface; but this height proving insufficient the pillar was raised by 7.3 feet during the same season. The estimated directions and distances of the following villages are:—Sandla S.W. by W., mile 1; Bamori N. by W., miles 2; and Kamer E., miles 2.

VIII. Gurla Hill Station, lat. 23° 18′, long. 75° 36′—observed at in 1848—is situated on a northern spur of a low, flat-topped range of hills, which stretches in a S.S.E. direction from the station for some 4 or 5 miles, and is about 60 feet above the level of the country to the west. The station is in the lands of the village of Gurla, pargana Unel, Gwalior territory.

The station consists of a platform of loose stone masonry containing two marks, the upper 7.23 feet above the lower. It was visited by Lieutenant Heaviside in season 1868-69, who stated that "The mark-stone was not uneovered, but the pillar was apparently undistribed". When again visited in 1883, the station was found to consist of a platform of earth and stones 6.7 feet above the ground level having a mark-stone in its upper surface. The directions and estimated distances of the circumjacent villages are:—Unel N. by E., miles 3; Gurla W., mile 1; Nawada N.W., miles 3\frac{1}{2}; and Novela S.S.E., miles 4.

IX. Karsod Hill Station, lat. 23° 7', long. 75° 28'—observed at in 1848 and 1862—is situated on a small hill about 5½ miles N.E. of the town and railway station of Barnagar. It is towards the S. extremity of the hill, and 119 (ft.?) 8 (in.?) S. of the southern wall of a temple. It is in the lands of the village of Chota Karsod, pargana Barnagar, Gwalior territory.

The station consists of a platform (most probably constructed in a manner similar to those at the adjacent stations) and contains two marks, the upper 4.27 feet above the lower. When visited in 1862, in the course of the Guzerat Longitudinal Series operations, the station was found to be about 5 feet in height. When again visited in 1883, the station was found in good order and to consist of a platform of earth and stones enclosing a perforated pillar of masonry 5 feet high with two mark-stones, one in its upper surface and the other below; an aperture on the S. side gives access to the lower mark-stone. The estimated directions and distances of the circumjacent villages are:—Rasalabad S., mile 4; Chota Karsod N.E. by N., miles 14; and Palwas N., miles 24.

X. Jalálkheri Hill Station, lat. 23° 11′, long. 75° 45′—observed at in 1848—is situated on a detached hill about a mile S. of a table-land. The station is on the northern of two eminences rising 20 feet above the hill top, and some 100 feet above the level of the country and lies 3½ miles west of the railway station near the town of Ujjain: pargana and district Ujjain, Gwalier territory.

The station consists of a platform of loose stones about 10 feet square and 6 feet high, the central portion from 2 to 3 feet square is of solid masoury in which three mark-stones are inserted, the two upper being 2.75 and 6.08 feet respectively above

one imbedded in the foundation, the second mark-stone is about the ground level. In 1869 Lieutenant Heaviside found the upper mark-stone in position. When visited in 1883, the station was found to consist of a platform of earth and stones 16 feet square and 3.8 feet high with a mark-stone in its upper surface. The directions and estimated distances of the circumjacent villages are:—Jalálkheri W.N.W., mile 1; Mendpura E.N.E., miles 1½; and Chandukheri S.W. by S., miles 1½.

XI. Kaula-ka-Máta Hill Station, lat. 23° S', long. 75° 13'—observed at in 1818—is on an isolated and symmetrically shaped hill rising about 500 feet above the plain. The station is at the N.E. corner of the flat roof of the porch and E. of the spire of the large templo of Kaula-ka-Máta from which the hill derives its name. The station is in the lands of the village of Barmaval, Sailána State, Western Malwa Agency.

The station is denoted by two marks, the upper 0.75 of a foot above the lower: It was visited in 1869, when "the mark was found in good preservation". When again visited in 1883, the station was found to consist of a square pillar of masonry 6 inches high with a mark-stone in its upper surface, the height of which above the top of the hill is 18½ feet. The directions and estimated distances of the circumjacent villages are:—Amleti N.E., mile 1; Barmaval W., ailles 3; and Lochitara (on the high road to Mhow) E., miles 2.

Another principal station, about 20 yards S. of the temple, was established in 1862 in the course of the operations of the Guzerat Longitudinal Series, in which Series its full description will be found under the name of Station "I. Kanla-ka-Mata".

XII. Harnása Tower Station, lat. 22° 47′, long. 75° 36′—observed at in 1847 and 1848—is situated on the highest part of the country, the watershed of the Gambhír and Chambal rivers, and 4 miles S. by E. of the town of Depalpur on the road from Neemuch to Indore: pargana Depalpur, Holkar's territory.

The station as originally huilt in 1846 consisted of a solid pillar of masonry sunk to a depth of about 9 feet, having its upper surface flush with the ground level. It contained two marks, one at the surface about 9 feet above the other. Over the pillar a loose stone platform was constructed with a mark in its upper surface. The height of the platform above the top of the pillar appears to have been originally 7.35 feet; but this not proving sufficient it was increased to 10.31 feet in April 1847. The station was revisited in 1869 by Mr. J. Wood, Assistant Surveyor, who removed the pile of stones and found a mark-stone about 3 feet below the ground level. He built up the pillar to the ground level and placed a mark-stone there. At this level astronomical observations for latitude were taken in 1869-70. Immediately afterwards a perforated masonry pillar was built over the mark-stone at the ground level and carried up to a height of 10.31 feet, the height of the station as given in the original description. The pillar is surrounded by a platform, and an arched passage runs nearly north and south through the platform and pillar giving access to the mark-stone. When again visited in 1883, the upper 4 feet of the pillar was found unlied down, it was rebuilt to a height of 10.2 feet above the ground level mark. The directions and distances of the circumjacent villages are:—Jaloda N.E. by.N., miles 13; Harnása S. by E., mile 3; Suklandi S. by W., miles 13; Básoda W. by N., mile 3; and Girora N. by W., miles 2.

XIII. Indráwan Tower Station, lat. 22° 49′, long. 75° 13′—observed at in 1847, 1848 and 1862—is situated on rising ground, about 1 mile N.W. of the village from which the station obtains its name, and 8 miles N.N.E. of Desi. The station is in the lands of the village of Barawál, pargana Badnáwar, Dhár State, Bhopáwar Agency.

The station as originally built in April 1847 consisted of a solid pillar of masonry sunk to a depth of 6.3 feet, containing two marks, the upper in the surface of the pillar being at the ground level; over this a platform of loose stones, 7.46 feet in height, with a mark at the top was constructed. In November-1848 an addition of 2.17 feet was unde to the height of the platform. It was again visited in February 1862 in the course of the operations of the Guzerat Longitudinal Series: in the records of that Series it is simply stated that it is built 4.75 feet high. In 1869 the loose stone platform was removed; and over the original mark at the ground level, a perforated and isolated pillar of masonry 7.46 feet in height and 3½ feet in diameter was built with a mark-stone in its upper surface, and surrounded by a platform of earth and stones of the same height as the pillar. An arched passage from E. to W. gives access to the ground level mark. It thus appears that the station as last constructed is 2.17 feet lower than that of November 1848. When again visited in 1883, the pillar and its upper mark-stone were found in good order. The directions and distances of the circumjacent villages are:—Borjhiri W., mile 1; Burwai E., miles 2½; and Gundikheri S.E., miles 1½.

XIV. Mograba Hill Station, lat. 22° 23', long. 75° 22'—observed at in 1817—is situated on the summit of the highest, flat-topped hill 5½ miles to N.W. of the old, ruined city of Mando or Mandogarh: the small Bheel village of Mograba lies to the N.E. at about \(\frac{3}{4} \) of a mile in direct distance from the station: pargana Nalchha, Dhar State, Bhopawar Agency.

The station consists of a platform having its upper surface flush with the ground, which contains two marks, the lower, on a large stone set in the muram (a kind of gravid), is 0.40 of a foot below the one in the surface of the platform. It was visited in 1869, when the upper mark-stone was found firmly imbedded. When again visited in 1883, the station was found in good order and covered over by a protecting musoury pillar 3 feet, 8 inches high, but as the upper diameter was too small to admit of the theodolite, the upper 6 inches of the pillar were removed. The directions and estimated distances of the circumfacent villages are:—Tulwara N. by E., miles 8; Murkhall S., miles 2½; and Manulanda S.S.W., miles 3:

XV. Singarchori Hill Station, lat. 22° 25′, long. 75° 43′—observed at in 1847—is situated on the highest part of a range of hills so called, lying about 3½ miles E.S.E. of the village of Manpur on the high road from

Bombay to Agra, and $11\frac{3}{4}$ miles S.S.W. of the cantonment of Mhow. The hill is about 1000 feet in height: Mánpur State, Bhopáwar Agency.

The station was denoted by two marks, the upper 1.79 feet above the lower. When visited in 1883, a masonry pillar 2 feet in diameter and 3 feet above ground level surrounded by earthwork about 2 feet high was found; there being no mark-stone on the pillar its upper portion was removed and a mark-stone embedded in its centre 1.75 feet above the ground level. The directions and estimated distances of the following villages are:—Bargaon N.W. by N., miles 1½; Mograpura E.S.E., miles 1½; and Nayapura E. by N., miles 1½.

XVI. Gumánpur Tower Station, lat. 22° 35′, long. 74° 55′—observed at in 1847—is situated on rising ground about $\frac{1}{4}$ of a mile S. of the village of that name and about 200 yards N. of the edge of the Ghát, and $\frac{1}{2}$ miles N. by E. of the large village of Tanda. It is in the lands of the village of Gumánpur, Amjhera State, Bhopáwar Ágeney.

The station of 1847 consisted of a loose stone platform with a mark-stone at top 7.48 feet above one let into masonry at the ground level. In 1869 the platform was removed and a perforated and isolated pillar of masonry, 7.48 feet in height, built above the original mark at the ground level, and surrounded by a platform of stones: a passage from N. to S. gives access to the ground level mark. When again visited in 1883, the station was found to consist of a pillar of masonry 5.3 feet high and 3 feet in diameter with a mark-stone in its upper surface, and surrounded by a platform of loose stones. The directions and distances of the circumjacent villages are:—Ratanpura N.E. by N., miles 2; Ringuod E.N.E., miles 4; Nawapura E. by S., miles 1½; and Urai W.N.W., mile 4.

XVII. Thikri Hill Station, lat. 22° 1′, long. 75° 27—observed at in 1847—is situated on a knoll, 40 yards long, 20 yards wide, and 20 feet high, at the S. extremity of a table-land which rises about 300 feet above the general level of the surrounding country. It is about 3½ miles S. by E. of the Police Station of Thikri on the high road from Bombay to Agra: pargana Dharampuri, Dhar State, Bhopáwar Agency.

The station consists of a platform of loose stones enclosing a solid circular pillar of masonry which contains two marks, one at the surface 1.25 feet above the other which is engraved on the rock. When visited in 1869, the upper mark-stone was found firmly fixed; it was again visited in 1883, when the station was found protected by a rectangular capping pillar 3½ feet high built over the circular pillar level with the surface of the knotl. The directions and distances of the circumjacent villages are:—Rarkot S. by E., mile 1; Rupkhera S.W. by W., miles 1½; Khurrampur (on the high road) W., miles 4½; and Nader N.N.E., miles 2.

XVIII. Bawangaz Hill Station, lat. 21° 59′, long. 74° 54′—observed at in 1847—is on the terraced roof of a temple which is built of fine slabs of granite, on the highest part—a peak—of a remarkable hill called Bawangaz, about 5 finles S. of the Nerbudda river. The temple is dedicated to a god whose colossal figure is cut on the rock in bold relief, about 600 feet below, on the southern face or scarp of the hill. The station is almost in the centre of the flat portion of the roof E. of the dome, 13·12 feet from the nearest part of the circumference of the dome, 11·12 feet from the outside of the N. wall, and 12·75 feet from the outside of the S. wall; the roof of the temple is 10 feet above the ground. The station is in the lands of the village of Barwáni, Barwáni State, Bhopáwar Agency.

The station consists of a solid circular pillar of masonry which contains two marks, the upper 0.44 of a foot above the one engraved on a slab of granite of the roof. When visited in 1869 and 1883 the station and its upper mark-stone were found in good preservation. The directions and distances of the circumpacent places are:—Barwani town N.E., miles 4\frac{1}{4}; Chilkalda town N. by E., miles 7; Bhomin village N., miles 2\frac{1}{2}; Mangarpati and Kachkor (on the Goi stream) W.N.W., miles 3\frac{1}{2}; and Wadgaon E.N.E., miles 4.

XIX. Jalálabad Hill Station, lat. 21° 41′, long. 75° 27′—observed at in 1847—is situated on the highest peak of the same range of hills as that on which the old, ruined fort of Bijagarh stands and from which it lies 3½ miles in a direction E. by S. The station is in the lands of the village of Náráyangarh, pargana Khargon, Holkar's territory.

The station consists of a platform of loose stone masonry containing two marks, one at the surface and the other 0.44 of a foot below. It was visited by Lieutenant Ileaviside in 1869, when the upper mark-stone was found in position, and about 2½ feet above the ground level. In 1883 and 1884, the station was found in good preservation and the upper mark-stone in position. The directions and distances of the circumjacent villages are:—Sangri N.N.W., miles 4; Bhadwili N., miles 4‡; Sirwil Chanki (police station) and temple S.E. by S., miles 4‡; and Dhaura S.W. by S., miles 2½.

XX. Bábákuvar (Bábákuvar) Hill Station, lat. 21° 36′, long. 74° 57′—observed at in 1847—is situated on the main ridge of the Sátpura hills, about 9½ miles N.W. by W. of the Dak Bungalow at Palásner on the high road from Bombay to Agra, and 550 feet E. of an idol at the W. extremity of the hill. The station is in the lands of the village of Boradi, taluka Shirpur, district Khándosh.

The station consists of a platform of loose stone masonry containing two marks, one at the surface and the other 1 67 feet

below. When visited in 1883 and 1884, the station was found in good preservation and the upper mark-stone in position. The height of the platform is about 1 foot from the ground level. The directions and distances of the circumjacent villages are Chaparkhera N.E., miles 4½; Rajmali E., miles 4½; Vakvar S.E. by E., miles 5; and Khera S.E. by S., miles 64.

XXI. Argaon Hill Station, lat. 21° 18′, long. 75° 34′—observed at in 1847—is situated on a high peak of the Sátpuda range, rising some 2500 feet above the plains of Khándesh. The peak which is known by the name of Mondhiámal, is about 1½ miles W. of the ruins of Gauligarh, and 5½ miles N.N.W. of Argaon village. A small conical peak is 50 yards to S.E. The station is in the lands of the village of Bhadgaon, taluka Chopda, district Khándesh.

The station consists of a platform of loose stone masonry containing two marks, one at the surface and the other 081 of a foot below engraved on the rock. In 1869 Lientenant Heaviside found the upper mark-stone in position and nearly on the same level as the highest part of the peak. When again visited in 1884, the upper mark-stone and platform were found in good preservation. The azimuths and estimated distances of the circumjacent villages are:—Dhanora 4°, miles 6\frac{3}{4}; Adavad 42°, miles 8; Birgaon 6°, miles 6; and Mahorad 356°, miles 4\frac{1}{2}.

XXII. Ajuád Hill Station, lat. 21° 19′ long. 75° 5′—observed at in 1847—is situated on a long, high ridge running nearly in a direction W.N.W. and E.S.E. and parallel to road to south from Shirpur to Tauda on the Ancr river, about 2 miles N. of Ajuád village. The station is in the lands of the village of Ajuád, taluka Shirpur, district Khándesh.

The station consists of a platform of loose stone masonry containing two marks, one at the surface and the other 0.67 of a foot below engraved on the rock. When visited in 1884, the upper mark-stone and platform were found in good preservation. The azimuths and distances of the circumjacent villages are:—Babla 340°, miles 2½; Tarli 321°, miles 3½; and Bhatpur 28°, miles 3.

XXIII. Valvádi (Walvári) Hill Station, lat. 20° 44', long. 75° 14'—observed at in 1846—is situated near the N.W. extremity of a group or range of low hills about 90 feet in height. The station is about 20 yards from the W. edge of a flat, rocky hill, whose summit is 150 yards long and 30 yards wide. The station is in the lands of the village of Valvádi, taluka Páchora, district Khándesh.

The station consisted of a platform of loose stone masonry having a mark at its surface and another 200 feet below it engraved on the rock in sith. A heap of stones, apparently the station platform of some former survey, was found here: the centre of this heap was made the site. It was visited in 1870 by Lieutenant Heaviside, when the upper mark-stone was not found, the platform was partly dug up and a solid circular pillar of masonry was built up from the level of the lower mark to a height of 2 feet and a mark-stone inserted in its upper surface. When again visited in 1884, the station was found protected by a rectangular pillar 28 feet high built over the circular masonry pillar. The directions and estimated distances of the circumfacent villages are:—Maudla S.W. by S., miles 4; Titi W. by N., miles 2; Chorvár N., miles 2; and Valvádi S.B. by S., miles 1½.

XXIV. Dhanvár (Dhanvár) Hill Station, lat. 20° 53′, long. 75° 38′—observed at in 1846—is on the southern of a group of low, flat-topped hills which rises some 70 feet above the low range from which it springs, and is some 200 feet above the level of the country. The top of the hill is pear shaped, the station being about 20 yards from the narrow end and 60 yards from the broader. The station is in the lands of the village of Dhanvár, taluka Jalgaon, district Khándesh.

The station consists of a platform having the usual mark at its surface and another 0.98 of a foot below. In 1869 the upper mark-stone was in position and about 2 feet above the hill top. When visited in 1884, the upper mark-stone was found in the centre and upper surface of a platform 2 feet high. The azimuths and estimated distances of the circumjacent villages are:

Dhanora 186°, miles 2; Karmar 300°, miles 2; Dehori 210° miles 1½; and Palúskhera 350°, miles 4.

XXV. Anakvadi (Anakvari) Hill Station (locally known as Silla Dongar) lat. 20° 47′, long. 74° 44′—observed at in 1846 and 1847—is on the summit of a conical hill about 1000 feet above the plain and some 700 feet above the lower range from which it rises with precipitous sides. The station mark is 20 feet S.E. of a small heap of stones forming a shrine: it is in the lands of Anakvadi village, taluka Dhulia, district Khandesh.

The station consists of a platform having two marks, one in its upper surface and the other 2.5 feet below it. It was visited by Lientenant Heaviside in season 1868-69, who stated that "A mark-stone is in position and on a level with the surface of the ground." When again visited in 1881, the upper mark-stone was found protruding 6 inches above the surface of the three large stones on which the theodolite stand rested; this upper mark is 3.2 feet above and in the normal of the lower one engraved on the rock in sitd. The directions and estimated distances of the circumjacent villages are:—Anakvadi S. by W., miles 1½; Sargaon N.W. by W., miles 3; Dhulia N.E. by N., miles 10; Laling (fort) E.N.E., miles 4; and Arvi (Dak Bungalow) S.S.E., miles 2½.

XXVI. Sirsála Hill Station, also called Shekh Maru Pir, lat. 20°30', long. 75°34'—observed at in 1816—is on a hill about 200 feet high close to the N. edge of the table-land which rises gradually from the Godávári

river and here terminates in a northerly direction by a descent of some 1200 feet into the plains of Khándesh. About 1½ miles W. of the station and built in a gorge above a precipice of the table-land, is an uninhabited fort which contains a temple dedicated to Mahádev. The station is in the lands of the village of Sirsála, taluka Nánded, district Aurangabad.

The station consists of a platform of stones having a mark at its surface and another 0.83 of a foot below engraved on the rock in siti. In 1869 Lieutenant Heaviside found the upper mark-stone in position and about 2 feet above the hill top. When again visited in 1881, the platform and lower mark were found in good preservation, the upper mark-stone was replaced (having been picked up from the hill side) at 0.83 of a foot above and in the normal of the lower mark. The azimuths and estimated distances of the circumjacent villages are:—Kelgaon 37°, miles 2½; Borkhera 178°, miles 3; Sirsála 313°, miles 1½; Shekhpur 345°, miles 3; and Pipalgaon 354°, miles 3.

XXVII. Sátmála Hill Station, lat. 20° 20', long. 75° 10'—observed at in 1846—is on a hill so called, about 2 miles W. of a chauki (police station) on the Ganthála Ghát, and 5 miles N. of the taluk town of Kanad. The line of Gháts extends about 15 miles further west, and its descont to the plains to north is considerable. The station is in the lands of the village of Ganthála, taluka Kanad, district Aurangabad.

The station originally consisted of a platform about 5 feet high, having a mark-stone at its surface and another 5:00 feet below. In season 1816-47, the platform was raised 4:04 feet. When visited in 1884, the platform was found 9 feet high, built of loose bonblers, having a mark-stone on its summit not firmly fixed, as the structure was too shaky for observation the upper portion was removed till the mark-stone said to be 5 feet above the ground level was disclosed wedged in between three large stones used for the theodolite stand to rest on. As this part was firm and adapted for observations, the platform was built up to the level of this mark. No masonry pillar appears to have been built here, nor could one be creeted now as both water and labour were difficult to obtain. The azimuths and estimated distances of the following places are:—Būnni 315°, miles 5½; and Hevadgaon 350°, miles 4½.

XXVIII. Popula Hill Station, lat. 20° 2′, long. 75° 81′—observed at in 1846—is on the highest part of a hill, 1½ miles N. E. of that village, a vadi (garden) of which is close below the station. It is 7.25 feet (20° N. of W.) from the centre of a tomb. The station is in the lands of the village of Popula, taluka Phalamri, district Aurangabad.

The station consisted of a platform having a mark-stone at its surface and another 1.08 feet below. When visited in 1884, no mark-stone were found, the platform, with an excavation in the centre, remained to mark the site of the station. A mark-stone was built into the centre of the platform—7.25 feet from, 20° N. of W. of the centre of the tomb (above mentioned), and on a level with the upper surface of the platform which is 1.25 feet above the surface of the bill. The azimuths and estimated distances of the following villages are:—Kamkhera 3°, miles 3; Modhai 56°, miles 2; Chincholi 91°, miles 14; Bamangaon 212°, miles 2; and Vaghul 266°, miles 2.

XXIX. Rájnr Hill Station, lat. 20° 4′, long. 75° 54′—observed at in 1846 and 1862—is on a small conical hill about 200 yards W. of the village, and N. W. of a large temple, about 50 feet high, built of most elaborately carved stone, having two tiers of pillars above its base which is 13½ feet high. The horizontal distance of the station to the N. W. pillar of the first tier is 68.8 feet, and that to the N. W. corner of the base, 66 feet. The station is in the lands of the village of Rájur, taluka Jaffrabad, district Aurangabad.

The station first consisted of a platform 14 feet high with two mark-stones, a large one, about 3 feet square and 2 feet thick, at the top and another 13.75 feet below about the ground level. It was visited in 1862 and then rebuilt to a height of about 20 feet. When again visited in 1884, the surrounding platform was found to have fallen away leaving the upper 12 feet of the circular masonry pillar exposed, this was rebuilt with stones. The upper mark-stone was in position, 20.25 feet above and in the normal of the mark at the ground level. The azimuths and estimated distances of the following villages are:—Chanaigaon 32°, miles 2; Taplichandai 112°, miles 1½; Kamkhera 212°, miles 1½; Lon 283°, miles 2; and Tapon 327°, miles 1½.

XXX. Yerúl Hill Station, lat. 19° 59′, long. 75° 12′—observed at in 1846—is on the high table-land, about 2½ miles S. of the celebrated cave temples. The station is 418 feet W. of a conspicuous Bar tree, 1949 feet E.N.E. of an old station of the Bombay Trigonometrical Survey, and 60 feet from the southern and 525 feet from the northern edge of the hill. It is in the lands of the village of Súribhanjan, taluka Rŏza, district Aurangabad.

The station consisted of a platform with two mark-stones, one at the ground level and the other 2:13 feet below. In 1870 the upper mark-stone was not found, but the lower one was probably in position. A pile of stones about 3 feet in height was then erected over the platform. When again visited in 1881, no mark-stones were found and only a heap of boulders marking the site of the platform. The platform was rebuilt to a height of 1 foot, taking the centre of the heap of boulders as a guide and a mark was placed in the centre and on a level with its upper surface. The position of this mark was tested by observing the horizontal angles between the four adjacent stations with a 14-inch theodolite which showed no appreciable difference with the angles measured in 1816. The estimated directions and distances of the following places are:—Daulatabad (minaret) S.E., miles 42; Chumar Tekri (centre of hill fort) S.E. by S., miles 8 or 9; and Daulatabad (Röza, mansoleum) N.E., miles 34.

XXXI. Jámkhed Hill Station, lat. 19° 41′, long. 75° 42′—observed at in 1845, 1846 and 1862—is situated on a square, flat-topped knoll rising about 20 feet above the surface of the irregular plateau like range trending east and west and terminating about 150 feet to the east of the station in an abrupt fall to the plain below, and lies about 2 miles N. of the town of Jámkhed. The station is in the lands of the village of Rhailgarh, taluka Ambad, district Aurangabad.

The station of 1846 consisted of a platform containing two mark-stones; the lower 163 feet below the one at the surface of the ground. When visited in 1862, the mark at the ground level of the old station was found and over this a circular perforated and isolated pillar of masonry 3½ feet in diameter was built, earrying a mark in its upper surface 3'00 feet above the one at the ground level, access to which was obtained by a passage constructed for the purpose. When again visited in 1884, the circular masonry pillar and the rectangular aperture for plumbing over the mark at the ground level were found in good preservation, but no upper mark. The height of the upper surface of the pillar above the one at the ground level is 3 feet. The azimuths and estimated distances of the following villages are:—Jánkhed 4°, miles 2½; Rhailgarh 180°, miles 2; Kingaon 271°, miles 2; and Vitalvádi 386°, miles 1½.

XXXII. Ahirmal Hill Station, lat. 19° 33', long. 76° 7'—observed at in 1862—is situated on an isolated hill of that name, about 1½ miles N.E. by N. of the village of Dhakephal. The platform of the station is built contiguous to a Muhammadan mosque. It is in the lands of the village of Dhakephal, taluka Ambad, district Aurangabad.

The station consists of a platform of loose rubble, enclosing a central, isolated and perforated pillar of masonry 5 feet in height. Access to the lower mark is obtained through a passage specially constructed for the purpose. When visited in 1894, the circular masonry pillar and the mark in its upper surface were found in good preservation. The azimuths and estimated distances of the circumjacent villages are:—Dhargaon 5°, miles 3½; Hadgaon 115°, miles 1½; Jaula 169°, mile 1; and Jhirgaon 260°, miles 2½.

XXXIII. Mathuri Hill Station, lat. 19° 11′, long. 75° 32′—observed at in 1845 and 1862—is on the N.W. corner of the temple built on the conical hill 1½ miles E. of Mathuri village, over the junction of the walls of the smaller shrine: it is in the lands of the village of Mathuri, taluka Bid, Nizam's territory.

The station of 1845 contained two marks, the one imbedded in the stone masonry of the wall 138 feet below the upper which was fixed at the level of the roof which is 10 feet above the ground. When visited in 1862, the mark on a level with roof of the temple was found in position, over which a solid, circular pillar of masonry was built carrying a mark in its upper surface 1.17 feet above the one level with the roof. When again visited in 1884, the upper portion of the circular masonry pillar was found broken and the upper mark-stone removed; but the mark of 1815 on a level with the roof of the temple was found in position. The pillar was rebuilt to a height of 1.17 feet above the roof of the in its upper surface. The directions and distances of the circumjacent villages are:—Bhorgaon S. by ... S.W., miles 41; Mirsángvi W.S.W., miles 41; Titurvani E. by S., miles 11; and Malegaon W. by N., miles 32.

XXXIV. Dhaigaon Station, lat. 19° 31′, long. 75° 15′—observed at in 1845—is situated on the high ground, about 1½ miles S. of the Vagji stream which joins the Godávari river at 2½ miles to N.E. of the station. It is in the lands of the village of Dhaigaon, taluka Nevása, district Ahmednagar.

"The soil was exervated to a depth of about 4.75 feet and 2½ feet below the muram (a kind of gravel), a large stone, about 4 feet long and 1 foot square, with the usual mark on its upper surface, was imbedded in the muram. From the surface of the muram a pillar of stone masoury about 4 feet in diameter has been built up and raised about 2 feet above the ground. A platform of loose stones has been built around the pillar and a stone with the usual mark placed at its surface at the height of 20½ (?) above the mark on the large stone". When visited in 1884, the pillar and the mark were found in good preservation. The azimuths and perambulated distances of the following are:—Dhaigaon (large pipal tree S. of village) 76°, miles 1.95; Gheori (temple) 306°, miles 2.06; and Devlána (temple on right bank of the Godávari) 219° miles 2.29.

XXIII. (Of the Bombay Longitudinal Series). Chincheli IIII Station, lat. 18° 55′, long. 75° 19′—observed at in 1815—is situated on a short narrow ridge about 300 feet long trending east and west nearly, and 30 feet higher than the level of the surrounding plateau. The station is on the western end of the ridge while a large bar tree marks the eastern extremity. The large village of Ashti on the high road from Ahmednagar to Jamkhed lies about 10 miles to S.W. by S. and that of Amaluer 4 miles to E. by N. of the station. It is in the lands of the village of Chincheli, taluka Ashti, Nizam's territory.

The station consists of a solid platform and contains two marks, the one at its surface is 0.83 of a foot above one fixed in 1834. When visited in 1884, the station was found to consist of a circular masonry pillar 2.8 feet in diameter at top with a mark-stone embedded flush with its upper surface: the pillar is surrounded by a largo irregular shaped platform of loose boulders from which it is not isolated. Indging from the appearance the pillar does not appear to be very ancient. The height of the upper mark above the ground level is 10.6 feet. The azimuths and distances of the circumjacent villages are:—Chikhli 18°, miles 2; Chincholi 31°, mile 2; and Gaugarvádi 67°, miles 23.

XXIV. (Of the Bombay Longitudinal Series). Agargaon Hill Station, lat. 19° 11′, long. 74° 55′—observed at in 1845—is situated on a low part of an extensive and irregularly shaped table-land, about 1 mile N. of that village, and 6½ miles E. by N. of Shendi which is ½ a mile E. of the high road from Ahmednagar to Aurangabad. It is in the lands of the village of Agargaon, taluka Nagar, district Ahmednagar.

The station as originally built consided of a platform of loose stone masonry and contained three mark-stones, one at the ground level and the other two 7:13 and 1354 feet respectively above it. When visited in 1882, the station was found to consist of a mound of loose boulders about 10 feet high and 30 feet in diameter, having a post—erected by a Survey Party about 2 or 3 years ago—rising 3½ feet above it, the mound was raised 16:43 feet above a heach-mark on the ground level and a mark-stone inserted at that height. When again visited in 1883, the upper mark-stone was found in position and protected by the usual rectangular pillar of masonry. The directions and distances of the following places are:—Alunchuagar S.W., miles 9; Ranjani S.E. by E., miles 2½; Rallar N.E. by N., miles 2½; Pimpalgaon Uzúni W. by S., miles 3½; and Deogaon S.W., miles 3.

Norm.—In some instances the names of Principal Stations, occurring in the foregoing descriptions, are given by two methods of spelling distinguished from each other by the use of R man and Italic type, as Station XXV Analysid (Analyside): the latter spelling is in keeping with that adopted in the pages containing the observed angles printed in March 1879, which was based on a list of names of places for the Bombay Presidency published under the orders of the Gomman type is in accordance with that in a revised edition of the same published in 1880, and with the list of names for the Dominions of His Highwess the Niram, published in February 1883. It will be seen that the two methods differ but slightly, notwillstanding where differences occur, both renderings are given so as to remove all possible doubt as to the identity of a station. The method of spelling in Roman type is hereafter exclusively adopted in the publication of this Beries.

Ectruary, 1889.

M. W. ROGERS,

In charge of Computing Office.

KHANPISURA MERIDIONAL SERIES.

PRINCIPAL TRIANGULATION. TRIANGLES.

Triangle	Station	Spherical Excess	Corrected Plane		Distance	
	Day.	-		Log. feet	Feet	Miles
1	Bálágara, XXIV Búda, XXI Dhamnár, II		80 17 42°41 70 28 25°72.	5,1011134	126215.8	23*905
. 2	Bûdn, XXI Dhannar, II	.61	29 13 51.87	5°0816499 4°7960898 ·	62530.2	22.857
į	Sitamau, I : Búda, XXI	62	39 23 51 52 50 50 6 06 89 46 2 42	4:9036849 4:9906042 5:1011137	80109-7 97859-8	15°172 18°534
8	Balágara, XXIV Sitamau, I	46 .	109 52 17.98	5 1233300	132840.4	23.905
4	Sítamau, I Dhamnár, II	45	64 39 56.81	4 9906042 4 7960898	97859 8 62530 2	18.534
- 1	Nigrun, III Sitamau, I	58 58 58	68 13 48.51 47 6 14.68	4 9949085 5 0066897 4 9036849	98834·5 101552·3 80109·7	19.233
5	Nigeun, III Dudhála, IV	1,01	49 49 10'28	5*1007639	126114-2	23.885

Norts.—1. The values of the side are given in the same line with the opposite angle.

2. Stations Biligara, XXIV and Buda, XXI appertain to the Kurachi Longitudinal Series of the North-West Quadrilateral.

No. of		Splierical	Corrected Plane		Distance	
Triangle	Station .	Excess	Angle	Log. feet	Feet	Miles
6	Dudhála, IV Nigrun, III Doo Dongri, V	" 1 · 2 2 1 · 2 2 1 · 2 2	6 / " 47 4 33.98 84 21 17.45 48 34 8.57	5.0902100 2.5323330 2.1004033	123171°4 167391°7 126114°2	23·328 31·703 23·885
7	Dhamnár, II Nigrun, III Lohári, VI	·84 ·84 ·84	72 37 29'94 58 53 12'01 48 29 18'05	5°1002476 5°0530789 4°9949085	125964°3 113000°1 98834°5	23.857 21.402 18.419
8	Nigrun, III Lohári, VI Deo Dongri, V	1°20. 1°19 1°1	77 26 24 92 50 28 43 55 52 4 51 53	5.1002426 2.1005426	155853·8 123171·4 125964·3	29.518 23.338 23.857
9	Lohári, VI Deo Dongri, V Dhanora, VII	1.10 1.10 1,10	46 17 18°39 51 45 4°49 81 57 37°12	5°0560419 5°0920595 5°1927175	152823.8 153611.4 113773.4	21.248 23.411 29.218
10	Deo Dongri, V Dhanora, VII Gurla, VIII	*44 *44 *45	61 51 12·38 '29 24 46·44 88 44 1·18	5.0014904 4.4473148 5.0260419	100343·8 55887·9	19.002 10.282 21.248
11	Dhanora, VII Gurla, VIII Karsod, IX	*49 *50 *50	48 53 16.85 53 57 37.26 77 9 5.89	4.8895432 4.9202418 5.0014904	77543°1 83222°7 100343°8	14.686 15.762 19.005
12	Lohári, VI Dhanora, VII Kaula-ka-Máta, XI	*47 *48 *47	16 59 22.02 126 2 39.02 36 57 58.96	4.7786086 5.2206490 5.0920595	123611.2 166206.9 1063.5	11.376 31.479 23.411
13	Dhanora, VII Karsod, IX Kaula-ka-Máta, XI	*38 *38 *38	73 41 37.68 40 58 53.45 65 19 28.87	4°9439963 4°7786086 4°9202418	87901.2 60063.2 83222.4	16.648 11.376 15.762
14	Gurla, VIII Karsod, IX Jalálkheri, X	*40 *40 *40	82 4 29'27 43 34 58'10 54 20 32'63	4*9755439 4*8181844 4*8895432	94524'4 65793'7 77543'I	17.461 14.686
15	Jalálkheri, X Karsod, IX Harnása, XII	*92 *92 *92	39 18 46·54 84 32 50·20 56 8 23·26	5°0930463 5°1717896 4°9755439	123892°9 148521°6 94524°4	23,462 28,150 14,005
16	Kaula-ka-Máta, XI Karsod, IX Indráwan, XIII	*80 *79 *79	83 38 7·10 56 42 6·59 39 39 46·31	5°1363075 5°0611079 4°9439963	87901.2 112108.6 136860.4	25.922 21.801 16.648
17	Karsod, IX Harnása, XII Indráwan, XIII	1,13 1,13	57 2 1.66 66 42 58.71 56 14 59.63	5 0969581 5 1363075 5 0930463	123892.9	23.677 25.922 23.465
18	Harnása, XII Indráwan, XIII Mograba, XIV	1.23 1.23	66 0 2.97 70 2 22.61 43 57 34.42	5°2162374 5°2285994 5°0969581	164527°1 169277°6 125013°8	31°160 32°060 23°677
19	Harnása, XII . Mograba, XIV Singárchori, XV	1.34 1.34 1.34	44 16 33.03 56 44 48.04 78 58 38.93	5.0806120 5.1590244 5.2285994	120396°0 144219°6 169277°6	22 802 27 314 32 060
20	Singárehori, XV Mograba, XIV Thikri, XVII	1.52 1.52 1.52	52 47 43.93 81 59 45.88 45 12 30.19	5°1307296 5°2253018 5°0806120	135123°1 167997°1	25.201 31.818 22.802

No. of	Station	Spherical	Corrected Plane		Dietance ·	
Triangle	Station	Excess	Angle	Log. fcet	Feet	Miles
21	Indráwan, XIII	1.60	67 9 37 79	5°2224298	166889 8	31.608
	Mograba, XIV	1.59	47 32 2 24	5°1257558	133584 4	25.300
	Gumánpur, XVI	1.60	65 18 19 97	5°2162374	164527 1	31.160
22	Gumánpur, XVI	2°58	65 59 27.74	5°3256814	-211680 · 8	40 091
	Mograba, XIV	2°59	67 56 19.04	5°3319590	214762 · 8	40 675
	Báwangaz, XVIII	2°58	46 4 13.22	5°2224298	166889 · 8	31 608
23	Mograba, XIV	1,88	61 49 20.08	5°2784758	189878·5	35 962
	Báwangaz, XVIII	1,88	38 51 2.15	5°1307296	135123·1	25 591
	Thikri, XVII	1,88	79 19 37.77	5°3256814	211680·8	40 091
24	Thikri, XVII	1.85	85 13 40.81	5*3383251	217934'i	41 275
	Báwangaz, XVIII	1.85	34 30 59.66	5*0931439	123920'7	23 470
	Jalálabad, XIX	1.85	60 15 19.53	5*2784758	189878'5	35 962
25	Báwangaz, XVIII Jalálabad, XIX Bábákuvar, XX	1,83 1,83	50 26 42.92 41 55 22.11 87 37 54.97	5.2257597 5.1635562 5.3383251	168174'4 145732'4 217934'1	31 851 27 601 41 275
26	Báwangaz, XVIII	2°18	84 57 44 18	5°3597984	228980°4	43 368 4
	Thíkri, XVII	2°17	39 20 40 30	5°1635562	145732°4	27 601
	Bábákuvar, XX	2°17	55 41 35 52	5°2784758	189878°5	35 962
27	Bábákuvar, XX	1'43	77 18 58.03	5°2545349	179694°5	34'033
	Jalálabad, XIX	1'42	36 45 12.37	5°0422364	110213°9	20'674
	Ajnád, XXII	1'43	65 55 49.60	5°2257597	168174°4	31'851
28	Jalálabad, XIX	1.4	60 31 43°41	5°2172132	164897°2	31 · 231
	Ajnád, XXII	1.4	47 53 53°52	5°1477707	140530°6	26 · 616
	Árgaon, XXI	1.4	71 34 23°07	5°2545349	179694°5	34 · 033
29	Bâbákuvar, XX	1.85	36 51 4°70	5°1477707	140530 6	.26 616
	Jalálabad, XIX	1.85	97 16 57°08	5°3662899	232428 8	44 021
	Árgaon, XXI	1.85	45 51 58°22	5°2257597	168174 4	31 851
30	Ajnád, XXII Árgaon, XXI Valrádi, XXIII	2°70 2°70 .2°70	76 8 33 07 61 15 37 11 42 35 49 82	5.3738995 5.3296346 5.2172132	236537 · 2 · 213616 · 4 164897 · 2	44*799 40*458 31*231
31	Árgaon, XXI	1 °82	38 51 17.77	5°1792053	151079°4	28.614
	Valvádi, XXIII	1 °82	40 19 17.93	5°1926514	155830°1	29.513
	Dhanvár, XXIV	1 °83	100 49 24.30	5°3738995	236537°2	44.799
32	Ajnád, XXII	1,00	38 35 9°34	5 1926514	155830 1	29.513
	Árgaon, XXI	5,00	100 .6 57°40	5 3908799	245968 7	46.585
	Dhauvár, XXIV	5,00	141 17 53°26	5 2172132	164897 2	31.231
33	Dhanvár, XXIV	1°45	58 39 52:48	5°1586444	144093'5'.	27.290
	Valvádi, XXIII	1°45	57 45 23 61	5°1543786	142685'1	27.024
	Sirsála, XXVI	1°46	63 34 43:91	5°1792053	151079'4	28.614
31 _.	Ajnád, XXII	2.68	44 52 42 53	5-2257841	168183.8	31 853
	Valvádi, XXIII	2.69	71 27 23 56	5-3540683	225979.1	42 799
	Anakvádi, XXV	2.69	63 39 53 91	5-3296346	213616.4	- 40 458
35	Anakvádi, XXV Valvádi, XXIII Sátmála, XXVII	1.96 1.96	42 38 37.84 87 7 0.47 50 14 21.69	5-1708844 5-3394641 5-2257841	148212 4 218506 4 168183 8	28.071 41.384 31.853

No. of	City	Spherical	Corrected Plane		Distance	
Trianglo	Station	Excess	Angle	Log. feet	Feet	Miles
36	Valvádi, XXIII	1 · 47	60 44 52·51	5°1698059	147844°7	28.001
	Sirsála, XXVI	1 · 47	61 0 11·87	5°1708844	148212°4	28.001
	Sátmála, XXVII	1 · 47	58 14 55·62	5°1586444	144093°5	27.290
37	Sirsála, XXVI Sátmála, XXVII Pophla, XXVIII	1.41	60 41 43·38 65 50 -52·17 53 27 24·45	5.2024011 2.2220842 2.1698029	160472°7 167913°1 147844°7	30,393 31,805 58,001
38	Sirsála, XXVI	1.42	41 43 26.80	5.1203540	131933°1	24.987
	Pophla, XXVIII	1.43	80 23 2.18	5.2910314	195448°1	37.017
	Rájur, XXIX	1.45	57 53 31.02	5.2250845	167913°1	31.802
39	Pophla, XXVIII	1.42	67 22 46·14	5°1911635	155297°1	29°412
	Rájur, XXIX	1.41	60 58 25·86	5°1676370	147108°2	27°861
	Jámkhed, XXXI	1.41	51 38 48·00	5°1203540	131933°2	24°987
40	Sátmála, XXVII Pophla, XXVIII Yerúl, XXX	1.14 1.14 1.14	43 16 33°97 54 10 0°68 82 33 25°35	5.0450926 5.1179495 5.2054011	110941.1	21.012 24.849 30.393
41	Pophla, XXVIII	1,52	104 36 39'30	5°3125663	205383°9	38.898
	Yerúl, XXX	1,52	43 52 32'79	5°1676370	147108°2	27.861
	Jámkhed, XXXI	1,54	31 30 47'91	5°0450926	110941°1	21.015
42	Rájur, XXIX Jámkhed, XXXI Ahirmal, XXXII	1.80	47 39 8·77 81 45 34·19 50 35 17·04	5.1911635 5.1911635	148557·6 198930·2 155297·1	28.136 37.676 29.412
43	Áhirmal, XXXII	2°23	51 39 22.01	5.2799183	190510.5	36.081
	Jámkhed, XXXI	2°24	90 38 20.00	5.3854073	242888.4	46.005
	Mathuri, XXXIII	2°3	37 42 16.49	5.1718949	148557.6	28.136
44	Yerúl, XXX	2.12	50 56 31·86	5.2169643	164802·7	31.513
	Jámkhed, XXXI	5.12	53 39 19·99	5.2328657	170948·7	35.377
	Dhaigaon, XXXIV	5.19	75 24 8·15	5.3125663	205383·9	38.898
45	Jámkhed, XXXI Dhaigaon, XXXIV Mathuri, XXXIII	1.02 1.05	50 46 58.24 73 16 31.92 55 56 29.84	5°1878535 5°2799183 5°2169643	154118.0 190510.2 164802.7	31,513 39,081 30,180
46	Dhaigaon, XXXIV	2*04	82 51 24.07	5°33°6386	214110.8	40,221
	Mathuri, XXXIII	2*04	51 33 51.00	5°2279535	169026.0	35,013
	Agargaon, XXIV	2*04	45 34 44.93	5°1878535	154118.0	56,186
47	Mathuri, XXXIII Agargaon, XXIV Chincholi, XXIII	1,22 1,22	50 49 39.38 33 29 7.07 95 41 13.55	5·2222227 5·0745027 5·3306386	166810°2 118714°2 214110°8	31.593 22.484 40.551
4 8	Dhaigaon, XXXIV	1.41	32 50 48·17	5'0745027	118714.2	22:484
	Mathuri, XXXIII	1.41	102 23 32·57	5'3299499	213771.5	40:487
	Chincholi, XXIII	1.41	44 45 39·26	5'1878535	154118.0	29:189

Note.—Stations Chincholi XXIII and Agargaon XXIV apportain to the Bembay Longitudinal Series of the Southern Trigon.

November, 1892.

J. ECCLES,

In charge of Computing Office.

KHANPISURA MERIDIONAL SERIES.

SECONDARY TRIANGULATION. TRIANGLES.

PRINCIPAL-AUXILIARY. AND SECONDARY STATIONS, AND INTERSECTED POINTS.

Differences between the common sides of two triangles are shown by the small figures in the 5th and 12th columns between the data of the triangles, the first in order having supplied the greater value.

	NON.				` 	-
e illol	boodT sea	15. 15.	. 2,2	: ,, = <u>,,</u> = ·		(A 5 5)
,	Miles	13.830 15.896 15.896	22.587	22,587 23.970 19.233	13.024	14.359
Distance	Feet	73021 83928 101552	119260 48970 126114	119260 126560 101552	75818 .68765 126114	75818 97076 101352
	Log, feet	4.863445 4.923909 5.006690	5.076495 4.689926 5.100764	5.076495 1119260 5.102296 126560 5.006690 101552	4.879770 4.837367 5.100764	4.879770 4.987111 5.006690
Corrected	Plano Anglo	45 8 10 54 33 15	70 42 44 22 48 11	61 54 0	30 53 .4 27 44 47 121 22 .9	.44,48,30 .64,28,0 .70,43,30
	, ,	. h.s.	,		Î.B.	li B
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		Sítamau, I Nigrun, III Párlin	Dudhála, IV Nigrun, III Gualed Hill Tres	Stamau, I Nigrun, III Gualed Hill Troe	Dudhala, IV. Nigrun, III. Tarauli-	Sframan, I Nigran, III Taranli
· 10 . olgu	oN sixT	, 40°	 	, 25°.	29	
doliko ed	osifT,	Inch 15	· # # # # # # # # # # # # # # # # # # #	, 2 2 2	. ¹³³ , 2 .	, a k
. '	Miles	21.167 2.128 2.128	11.949 10.088 15.172	11,949 15,415 22,857	14.392 2.199 15.172	13.830
Distanco	Feet	111760	63092 53266 80110	63092 81389 120684	75991 11612 80110	73021 81585 126114
	Log. feet	5.048285 4.050596 5.081650	4.799976 4.726453 4.903685	4.799976 4.910567 5.081650	4.064895 4.064895 4.903685	4.863445
Corrected	Flane Angio	. 33	51 49 46 41 35 8 86 35 -6	28.28.51 112.40.45	55.17.9	33 8 58 37 39 32
		` ,	11.8	i i		#
Station		Báldgara, XXIV. Obabniár, II. Backlera Ifill Bush	Staman, I Dhamuir, II Digan	Bátigara, XXIV Dhannár, II Dìgau	Shaman, I Dhaman, II Shaman Hill Tree	Dudhála, IV Nigenn, III. Párlia
lo .c	,X.	 	93.	3	63	83

Norts.—1. Names followed by Roman numerals are those of Principal Stations. Station Distigara XXIV oppositations to the Karachi Longitudinal Beries of the North Vest Quidributeral.

	posu'T posu'T	Inch 557 1.4 551 ", 857 ",	852 15 770 "	815 "	6.304 ",	3.294 8.057 7 6.304	3.762 15 8.083 7 6.304	3.067 15 8.225 7 6.304	2.242 15 6.co3 7 6.304	2.242 ", 2.065 ", 3.294	2.480 6.849 8.057	996 ", 479	i.
65	t . Miles	6 522 19.057 271 12.551 964 23.857	359 12.852 543 16.770 854 29.518	88784 16.8 88784 16.8 155854 29.3	61710 11.688 33287 6.304 55888 10.585	17390 3.3 42543 8.0 33287 6.3	19861 3.7 42677 8.0 33287 6.3	6196 3.0 3430 8.3		10904 2.0 10904 2.0 17390 3.3	13095 2.4 36166 6.8 42543 8.c	23° 10° 31°	22.
Distance	et Feet	92 100622 22 66271 48 125964	66 67859 55 88543 18 155854	-				H T (7)				00 121955 77 58060 49 166207	03 118876
	Log. feet	5.co2692 4.821322 5.100248	4.831606 4.947155 5.192718	4.830197 4.948333 5.192718	4.790357 4.522281 4.747318	1.24030† 4.625831 4.522281	4.298008 4.630197 4.522281	4.209399 4.637788 4.522281	+.522281 +.522281	+.073235 +.037567 +.240304	4.117113 4.558234 4.628831	5.086200	5.075093
Corrected	Plane Augle	52 37 39 31 33 39 95 48 42	4 11 56 5 28 56	4 15 53 5 36 6	83 27 59 32 24 21	22 33 39 110 11 0	26 50 59 103 57 10	19 6 57 118 34 45	20 48 13 72 0 32	42 8 29 38 10 28	16 45 47 52 47 20	33 20 44 15 10 14	45 16 34
		h.s.	_		11.8,	11.8.	11.8.	l.8.	Л.В.	1.8.	É		
i de la companya de l	Sintion	Iohári, VI Nigrun, III Parnakheri	Deo Dongri, V Lohari, Y1 Parnaji Pagoda No. 1	Deo Dongri, V Loharí, VI Parnaji Pagoda No. 2	Deo Dongri, V Gurla, VIII Karai	Deo Dongri, V Kurai Mehidpur	Deo Dongri, V Karni Mehidpur Flag-staff	Deo Dongri, V Karai Nehidpur Tomb	Deo Dongri, Y Karai Dulet Templo	Mehidpur Karni Dulet Tomplo	Deo Dongri, V Mehidpur Karai Pagoda	Lohári, VI Kaula-ka-Máta, XI Pancher Hill Pagoda	Lohári, VI
lo. əfgu	.oZ isirT	7.1	27 25	7.3	7.	73.	7.6	77	78	52	80	81	
dolito ed		Inch 15	# : :	222	12 :	2.2		2 2			2 2		1.1
	Miles	30.663	9.053	9.053	9.328	18.529	8.626 8.626 8.719	7.058 23.389 23.857	23.525 6.685 23.857	23.525 16.013 18.719	24.775	24.775 3.596 23.857	19.057
Distance	Feet	161902 123171	4780 9731 12317	47801 70342 75818	84488 52312 123171	97834 22154 113000	115119 45547 98834	37265 123494 125964	124211 35296 125964	8454 9883	130810 102456 98834	130810 18986 18986	100622
1	Log. feet	5.209251	5.0928160 4.088160 4.058160	4.679433 4.847214 4.879770	4.926797 4.718597 5.090510	1.990489 1.345452 5.053079	2.cc1146 4.658458 5.cc1146	4.571296 5.091645 5.100248	5.094160 4.547723 5.100248	2.06+66. 4.652103 201460	5.010640 5.010538 4.994909	5.116640 4.278434 5.100248	2.002692
Corrected	Angle	13 34	9 33 17 37 32 50	56 44 48 29 14 47	18 37	33 6 48 31	0 27	8 42 40 7	4 49	53 28 41 8	2 23 41 10	38 50	40 8
රි	Plane	83 .	21 47 111	37 64 77	33		23	77	79	+ 2	81 50	100	53
ပိ	Plane	83 1.47					239	17	79	5 7 	81 h.s. 50).s. loc	53
S		Nigrum, III 83 1 Deo Dongri, V .47 .	47	37 64 77			Dhannár, II Nigrun, III Pingrála Hill Pagoda	Nigrun, III Lohári, VI Bhátkheri IIII Pagoda	Lohári, VI Nigrun, III Bhátkheri Hill Treo	Dhamnir, II 84 Nigrun, III 1200 42			Deo Dongri, V 53

,.				A	Distanco		olite L	elg 30			Corrected	A	Distance		olito b	
Lancis I.	Station	-,	Corrected PlaneAngle	Log. feet	Foct	Miles	poor[],	No. O. C.	Station		Plane Angle	Log. feet	Feet	Miles	poorL	
88	Dea Dangri, V Dhanora, VII Jaar Hill Treo	,	5 23 14 124 22 38	4.142898 5.086928 5.056042		2.632 23.136 21.548	Inch IS	35	Baloda Semlia Nagora	12 ° ° °	0 / " 41 45 48 105 11 48 33 2 24	4.654461 4.815493 4.567526	3 45130 65387 36942	8.247	Inch 14	
. 38	Kanla-ka-Náta, XI Dhanora, VII Ilar Hill Treo		13 16 42 83 37 40	4.142898	13896 60128 60063	2.632 11.388 11.376	<u> </u>	96	Indráwan, XIII Gumánpur, XVI Kapátal	ī,a.	22 14 10 19 18 55 138 26 55	4.823572 4.823572 5.125756	76213 66615 133584	14.434		
	Gurla, VIII Karsod, LX Borcha Hill Tres		47 2 56 88 38 4	4.909773 5.045177 4.889543	81241 110963 77543	15.387 21.016 14.686	= :	76	Indrávan, XIII Kapátal Shergarh	க் ம் பூ	110 11 59 15 37 36 54 10 25	4.887093 4.345008 4.823572	77107 22131 66615	109.71	2 2 2	
. os	Kailda-ka-Máta, XI Karsod, IX Borola Hill Treg		29 29 56	4.638903 4.943996	81241 43541 87902	15.387 8.246 16.648		93	Kaula-ka-Máta, XI Baloda Jalodia	g. Il.s.	43 10 40 \$1 48 14 55 1 6	4.713987	51759 74869 61976	9.803	2 2 2	
	Girla, VIII Jalitkhori, X Dhalmu	II.B.	23 0 0	4.219204 4.599762 4.818184	33052 39789 65794	6.260		G G	Indráwan, XIII Shorgarh Jalodía	is a	25,53 14 130 24 35 23 42 11	4.380870 4.622414 4.345008	24036 41919 22131	4.552 7.939 4.192	2 2 2	
	Guela, VIII Jalilkheri, X Lupara	h,s.	25 30 51	4.689585 4.48059 4.818184	48931 30204 65794	9.267	2 :	100	Uarnésa, XII Singarchori, XV Routi	h.s.	76 38 36 37 49 53 65 31 31	5.188005	154172 97189 144220	29.199	13 22	
: 68	Harnísa, XII Karsod, IX Kwála	1 20	25 9 35 27 58 42 126 51 43	4.818446 4.861211 5.093046	65833 72646 123893	12.468 13.759 23.465	当::	101	Harnása, XII Reuti Nonod Hill Treo	h.8.	15 57 10	4.883131	31684 76407 97189	6.001	ng.	
00	Kaula-ka-Milta, XI Karsod, IX Kwila	. 12	38 20 0 85 45 28 55 54 32	4.818446 5.024697 4.943996	65833 105852 87902	12.468 20.048 16.648		102	Singárchori, XV Harnása, XII Deogurária	j. g.	59 17 42	5.131533 5.107045 5.159024		25.639	15	
	Knula-ka-Mita, XI Karsod, IX Baleda		47 42 48 44 46 51 87:30 21	4.813515 4.792225 4.943996	976	12.328 11.738 16.648	2,2,2	103	Routi Haruása, XII Doogurária	p.3.	22 17 9	5.131533 4.767241 4.987615	135373 58511 97189	25.639 11.082 18.407	, P.B.	. ,
.,,,,	Kwala Karsod, IX Baloda	E 'S'	68 38 28 40 58 37 70 22 55	4.813515 4.661159 4.818446	65090 45831 65833	12.338 8.680 12:468	2 2 2	101.	Reuti Deogurária Dewás IIill Tomplo	p.s.	97.11 10	5.069677	117,402 94726 58511	22.235 17.941 11.082	J- "	1.1 1.5
	Kaula-ka-Mata, XI Baloda, danka		22 11 .5 118 30 32 39 18 23	4.567526	36942 85973 61976	6.997	= = =	105	Reuti Doogurária Nagda Hill	E a	14 tg O	4.958177.	90819 75495 58511	107.201		
	Indránn, XIII Somlia 'Nagora	20	54 53 56 82 6 17 42.59 47	4.65446r 4.737498 4.575388	45130 54638 37617	8.547. 10.348 7.124	1 E E E	100	Routi Decementia Guestia IIII Ponk	p.3.	10 30 15 116 6 50	4.123529	13290 65458 58511	12.397		
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jo Slo		-	Compositor	A	Distanco			olg:			Corrected	H	Distanco		
.oV uniiT	Station	<u> </u>	Plane Angle	Log. feet	Feet	Miles	boodT osu	.oN Trian	Bintion		Plano Angle	Log. feet	Foct	Miles	oosdT est
107	Reuti Deogurária Indoro Pagoda	h. s.	23 15 15 24 19 21	4.495467 4.513840 4.767241	31294 32647 58511	5.927 6.183 11.082	Inch 7	119	Singárchori, XV Mograba, XIV Vatli	ћ. 8.	0 ./ " 12 26 47 153 18 29	5.023039 5.341972 5.080612	105448 219772 120396	19°971 41°623 22°802	Inch 15
108	Harnása, XII Singárchori, XV Rála Mandíl Hill Peak ·	•	50 27 4 61 I I7	5.077365	119499 135573 144220	22.632 25.677 27.314	15	120	Báwangaz, XVIII Mograba, XIV	h.B.	62 52 22 87 17 12	5.275557 5.325681	105448 188607 211681	19.971 35.721 40.091	:1-
109	Singárchori, XV Harnása, XII Machla Hill Peak	-	52 54 50 40 43 34	5.061757 4.974445 5.159024		21.833 17.857 27.314	2 2	121	Gnmánpur, XVI Mograba, XIV Lálgarh Hill Pagoda		2 21 O 1 32 16	5.004007 4.819903 5.222430	100927 66055 166890	19.115 12.510 31.608	15
110	Mograba, XIV Harnása, XII Machla Hill Peak		35 47 59 85 0 8	5.292981 5.292981 5.228599	30 115281 196327 169278	21.833 37.183 32.060		122	Singárehori, XV Mogrnba, XIV Lálgarh Hill Pagoda		15 8 29 146 42 13	5.326579	212119 120396	19.115	22,
111	Harnása, XII Singárchori, XV Machla Hill Temple		38 53 30 57 45 26	4.959811 5.089220 5.159024	91161 122806 144220	17.265 23.259 27.314	7	123	Mograba, XIV Gumánpur, XVI Dhutni Peak		66 8 2 4 33 21	5.208757	161718 14046 166890	30.628 2.660 31.608	z. z
112	Harnsa, XII Singárchori, XV Ambáh	h.s.	33 7 21 65 3 11	4.900994	79615	15.079	2.2	124	Mograba, XIV Singárchori, XV Nálchha Hill Dargah		15 15 8 5 26 44	4.952367 4.509564 5.080612	89612 32327 120396	16.972 6.123 22.802	
113	Ambál Singárchori, XV Mhow Church	h.s. B.	20 8 39 II5 48 4	4.788804 4.483646 4.900996		5.768 5.768 5.768	-42	125	Harnása, XII Singárchori, XV Nálchba Hill Dargah		35 52 37 73 31 56	4.952367 5.166244 5.159024	89612 146637 144220	16:972 27:772 27:314	::
114	Machla Hill Penk Singárchori, XV Mhow Church	rú.	8 0 18 157 36 47	4.788804 4.537504 4.974445	61490 34475 94285	11.646 6.529 17.857	15	126	Báwangaz, XVIII Thíkri, XVII Songarh Peak		31 58 38 86 11 9	5.332237	114060 214900 189879	21.602 40.701 35.962	
115	Singárchori, XV Mhow Church Dhajára Hill Peak	ri.	52 54 43 49 32 20	4.700985 4.680437 4.788804	50233 47911 61490	9.514	15	127	Singárchori, XV Thíkri, XVII Songarh Peak		42 I 7 38 21 2	5.024188 5.225302	1140 1057 1679	21.602 20.024 31.818	
116	Mograba, XIV Singárchori, XV Jánapáv Hill Pagoda	Ħ	7 37 33	4.257327 5.106550 5.080612	18085 127806 120396	3.425 24.206 22.802	15	128	Thítri, XVII Mograba, XIV Jámnia Hill Peak		16 14 4 45 29 1	4.632426 5.039058 5.130730	42897 109410 135123	8.124 20.722 25.591	2 2
117	Mograbn, XIV Singarchori, XV Asakheri Hill Tree		29 38 57 74 48 48	4.788928 5.079159 5.080612	61508 119994 120396	22.25		129	Singárchori, XV Mograba, XIV Jámnia Hill Peak		16 32 42 36 30 46	4.632426 4.952452 5.080612	4289 8963 12039	8.124 16.975 22.802	. r
118	Harnása, XII Singárchori, XV Dhár Hill Pagoda No. 1		68 47 40 46 15 18	5.060716	148414 115005 144220	28.109 21.781 27.314		130	Singárehori, XV Thíteri, XVII Gosainbaira	h.s.	12 48 38 164 56 1	4.405504 5.156253 5.225302	25439 143302 167997	4.818 27.141 31.818	14

alifolita ed		Inch 15	: :	2.2	2.2	= . t- ,	7 - 7	16	``£;`*	. 2	73. 25	10 z-	12
	Miles	26.669 10.680 34.033	26.669 17.085 31.231	919.9z 298.8z 266.9	6.65 29.919 29.513	33.412	14.637 18.530 10.669	26.662	4.780 23.958 28.614	28.718	268.7 7.892 7.892	5.753 13.485 7.892	21.633
Distanco	Feet	140811 56390 179695	140811	36946 152416 140531	36946 157971 155830	176415 56331 142685	77281 97836 56331	140776 6981 142685	126496 126496 151079	151633 50047 142685	132281 41672	30377 71198 41672	114219 50630 142685
I	Log. feet	5.148635 4.751205 5.254535	5.148635 4.955240 5.217213	4.567568 5.183030 5.147771	4.567568 5.198577 5.192651	5.246535	4.888074 4.990498 4.750751	5.148530 4.844357 5.154379	4.402024 5.102077 5.179205	5.180792 4.699381 5.154379	5.121496 4.619841 5.154379	4.482546 4.852469 4.619841	5.057741
Corrected	Plane Angle	39 28 47	58 35 53 33 8 51	13 43 41	13 30 2	118410 25	52 5 18 35 6 20	74 12 58	2 21 50 11 55 54	90 30 58 70 12 45	67 15 24 716 53 23 95-51-13	7 30 51 162 9 5	46 52 39
Stofice	Station	Jalálabad, XIX Ajnád, XXII Tasdin Hill Templo No. 2	Argaon, XXI Ajnid, XXII Tasdin Ilill Tomplo No. 2	Jaklabad, XIX Árgaon, XXI Sútpuda Hill Peak	Dhanrár, XXIV Árgaon, XXI Sátpuda Hill Peak	Dhanvár, XXIV Sirsála, XXVI Páldhi h.s.	Dhanvár, XXIV h.s. Páldhi h.s. Mauvol s.	Dhanrár, XXIV Sirsála, XXVI Padmála h.B.	Valvádi, XXIII Dhanvár, XXIV Jalka Poak	Dhanrin, XXIV Sirsila, XXVI Dohori	Dhanrar, XXIV Sirsala, XXVI Kokatnimbhora h.s.	Dhanvir, XXIV Kokatninbhora Jámner Hill Poak	Dhanvir, XXIV Siraila, XXVI Sámuce
ិ ១វិគ្គារ	ok mitT	143	11:4	145	146	147	1.18	GFT	150	151	152	153	127
eq qojiçe		Inch Lō 7	15 1-	2 2	35	: :	2 2	* *		2.2	,= 5	, a , a .	1.1
	Miles	26.878 15.384 40.701	11.784	11.087 2.064 11.784	160.ct 1.856 1.856	42.100 42.100 31.608	14.627 13.591 27.601	12'934 14'775 27'601	23.241	11.301	24.048	26.680 31.095 20.874	26.680 17.091 31.231.
Distance	Feet	141914 S1229 214900	62219 79560 81229	58541 10897 62219	212461 9800 211681	212461 2222288 166890	77229 71760 145732	68291 78013 145732	15008 122713 123921	62312 59672 110214	131723 114395 232429	1,10868	140868 90243 164897
	Log. feet	5.152025	4.897950 4.897956 4.909712	4.767459 4.037307 4.793920	5.327279 3.991213 5.325681	5.327279	4.857779 4.855882 5.163556	4.834364 41892170 5.163556	5.058889 5.058889 5.093144	4.775770	5.119661 5.058408 5.366290	5.215326	5'148812 4'955413 5-217213
Corrected	Plane Anglo	0 05 241 95 95 02	45 39 21 65-19 50	65.28.30 104.46.30	93 14 45	64 20 37	11 33 42	4 44.30	6 57 18 81 54 50	25 58 18 24 47 41	20 39 27	57 50 54 80 40 -5	58.38 2 33.9 41
	ffation	Báwangaz, XVIII Songarlı Peak Cliakori.	Báwangaz, XVIII Chakori Abnyuri IIII Pagoda	Chakeri Abapuri Hill Pagoda Anjar	Biskangaz, XVIII Megreba, XIV Anddilpani Hill Templo	Guminjin, XVI Maganda, XIV Andshpani IIII Temple	Bávangaz, XVIII Bibíkurar, XX Bori IIII Peak	Bávangaz, XVIII Bábákuvaz, XX Naktimáta Peak	Phikei, XVII. Jaliidaal, XIX. Bijagath Hill Forb	Babakuvar, XX Ajnid, XXII Varjari IIIII	Babálturar, XX. Árgaon, XXI. Khandra Hill	Bibilinvar, XX Ajnid, XXII Tasdin Hill Templo No. 1	Argaon, XXII Amid, XXIII Tasdin Hill Templo No. 1.
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Corr	Corrected	Corrected		Ð	Distanco		dolito	lo . elga	Slation	<u> </u>	Corrected	I	Distance		etilobe bes
Station Plano Anglo Log. feet Reet	Angle Log. feet	Angle Log. feet	feet	Fee	ديد	Miles		oN airT	Horney		Plane Angle	Log. feet	Feet	Miles	
Dhanvar, XXIV 24 24 35 5.026020 106175 Valvadi, XXIII 11 36 30 4.713470 5.1698 Bámbrud Hill Pagoda 5.179205 151079	24.35 5.026020 36.30 4.713470 5.179205	24.35 5.026020 36.30 4.713470 5.179205		1061 516 1510		20.109 9.791 28.614	Inch 15	167	Laling Hill Templo Valvádi, XXIII Bahádurpur	h.s.	36 56 47	4.922241 5.003488 5.188100	83607 100806 154206	15.835	Inch 15
Sirsála, XXVI Valvádi, XXIII Bámbrud Hill Pagoda 55 5'017472 10410	20 50 5.026020 8 55 5.017472 5.158644	20 50 5.026020 8 55 5.017472 5.158644	.026020 .017472	106 104 144	# 10 10 #	20.109	2.2	168	Anakvádi, XXV Valvádi, XXIII Bahádurpur	h.s.	41 7 48	4.922241 5.074508 5.225784	83607 118716 168184	15:835 22:484 31:853	15
Dhauvár, XXIV Valvádi, XXIII h.s. 21 54 37 4 837557 6 Mohári	33 .7 20 5.003201 1 21 54 37 4 837557 5 179205	.7 20 5.003201 54 37 4.837557 5.179205		ភិ	68795 151079	19.079 13.029 28.614	2.2	169	Valvádi, XXIII Sátmála, XXVII Junvána Hill Peak		86 25 26 43 40 52	5.286453 5.126554 5.170884	193398 133830 148212	36.628 25.347 28.071	15
Sirsúla, XXVI Valvádi, XXIII Mohári 1.8. 35 50 48 4.933986 Mohári 1.8. 5.158644	43 22 38 5 003201 35 50 48 4 933986 5 15864 1	22 38 5.003201 50 48 4.933986 5.158644			27 00740 85899 (44094	062.42 16.269 27.290	2.2	170	Anakvádi, XXV Sitmála, XXVII Junvána Hill Peak		39 56 59 6 33 32	5.286453 4.536599 5.339464	193398 34403 218506	36.628 6.516 41.384	
Valvádi, XXIII 20 6 58 4.833800 Dhanvár, XXIV 29 30 40 4.989826 Mohári Hill Peak 5.179205	6 58 4.833800 30 40 4.989826 5.179205	6 58 4.833800 30 40 4.989826 5.179205	_	-	68202 97684 51079	12.917 18.501 28.614	2.2	171	Sátmála, XXVII Valvádi, XXIII Arvi Poak		48 21 55 85 21 6	5.185439 5.310458 5.170884		29.027 38.710 28.071	2.2
Anakvidi, XXV Valvádi, XXIII Laling Hill Temple 5.225784	1 9 5.188100 11 1 4.261615 5.225784	1 9 5.188100 11 1 4.261615 5.225784	O 10 +	- H		29.206 3.459 31.853	2 2	172	Annkvádi, XXV Valvádi, XXIII Arvi Peak		17 28 55 1 45 56	5.185439 4.196422 5.225784	153264 15719 168184	29.027 2.977 31.853	2 2
Ajnád, XXII Valvádi, XXIII Coling Hill Tomple Ajnád, Tomple	43 3 5.188100 16 25 5.321525 5.329635	43 3 5.188100 16 25 5.321525 5.329635	.188100 .321525 .329635	H 19 19	31 1542C6 209665 213616	29.206	= =	173	Sátmála, XXVII Sirsála, XXVI Páchora	Ъ.в.	36 44 23 7 f 27 41 71 47 56	4.968930 5.168956 5.169806	93c96 147556 147845	17.632 27.946 28.001	: :1
Laling Hill Templo Valvadi, XXIII Kankráj L.s. Str. 14 58 5.085710 1 51 14 58 5.085710 1 52 14 58 5.188100 1	51 14 58 5.0857130 99 10 4 5.188100	4.887130 14 58 5.085710 10 4 5 188100			77113	14.605 23.072 29.206	-12	174	Dhanrir, XXIV Sirsila, XXVI Páchora	р.я.	40 37 19 53 7 18	4.968930 5.058348 5.154379		17.632 21.663 27.024	15
Anakrádi, XXV Valvádi, XXIII Kankráj Kankráj 1.8. 55 25 59 5.145191 1.8. 97 31 51 5.225784	4.887130 55 25 59 5.145191 97 31 51 5.225784	4.887130 25 59 5.145191 31 51 5.225784	.887130 145191 225784		77113 139698 168184	14.605 26.458 31.853	15	175	Páchora Sirsála, XXVI Varod	h.s.	146 6 11 23 50 30	5.108724 4.604363 4.968930	128447 40213 93096	24.327 7.616 17.632	7 ::
Laling Hill Temple h.s. 95 45 3 5 145017 1 Dhát , 60 13 26 5 085710	95 45 3 5.145047 60 13 26 5.085710	45 3 5.145013 13 26 5.085710			57141 139641 121818	10.822 26.447 23.072	2.2	176	Mohári Sirsúla, XXVI Varod	h.8.	95 16 20 41 45 10	5.108724 4.944145 4.933986	128447 87932 85899	24.327 16.654 16.269	z z
Anakvádi, XXV h.s. 97 23 16 5'197519 1 Kankráj n.s. 97 23 16 5'197519 1 Dhár , 61 32 14 5'145191 1	97 23 16 5°197519 61 32 14 5°145191	23 16 5:197519 32 14 5:145191	756947 197519 145191	H H	57141 157586 139698	10.822 29.846 26.458	2.2	171	Páchora Varod Bámbrud	h.s.	41 17 40 115 10 10 23 32 10	4.822531 4.959709 4.604363	66456 91140 40213	12.586 17.261 7.616	2 2 2
Anakvádi, XXV Laling Hill Temple h.s. 7 6 30 4.261615	41 12 35 4 987849 5 942317 7 6 30 4 261615	6 30 4.987849 5 4.261615	987849		97241 110234 18265	18-417 20-878 3-459	: :	178	Sátmála, XXVII Valvádi, XXIII Antár Hill Port		41 5 13 16 56 34	5.060023 4.706837 5.170884	50914 148212	21.746 9.643 28.071	15

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	Miles	25.065 24.406 28.071	3 29.772 9.114 3 37.017	3.66 10.83	32.019 20.498 28.614	31.954 26.147 24.987	31.954 5.862 37.017	15.92 15.93 37.01	23.7 15.3 37.0	23.769 13.519 24.018	13.31 7.14 15.37	13.31	20.463 5.545 23.769
Distanco	Feet	132345 128861 148212	15719 4812 19544	20930 57223 48122	169063 108227 151079	1687 1380 1319	168718 30953 195448	126813 84083 195448	125500 81177 195448	5 125500 71380 126813	70319 37728 81177	70319 34178 84083	108043 29276 125500
	Log. feet	5.121708 5.110122 5.170884	5.196447 4.682345 5.291031	4.320770 4.757567 4.682345	5.228048 5.034336 5.179205	5.227162 5.140053 5.120354	5.227162 4.490699 5.291031	5.103165 4.924710 5.291031	5.098642 4.909433 5.291031	5.098642 4.853579 5.103165	1.847071 4.576664 4.909433	4.847071 4.533745 4.924710	5.033595
Corrected	Plane Anglo	56 32 47 54 19 41	32 50 27 9 33 22	20 41 30 104 58 40	79 30 23 39 0 35	77 18 51 52 58 0	27 54 26 4 55 33	27 22 14 17 44 53	23 46 20 IS 6 50	72 33 27 32 51 43 74 34 50	59,56 17	5 2 2 3 3 2 8 2 7 1 2 9 10	47 49 13 11 35 1 120 35 46
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ž	Station	Valvádi, XXIII Sátnála, XXVII Koralla Hill	Sirsála, XXVI Rájur, XXIX Undangaon	Sirsála, XXVI Undangaon Vási Hill Peak	Valvádi, XXIII Dhanrár, XXIV Varad	Pophla, XXVIII Itájur, XXIX Jalki Hill Pagoda	Sirealla, XXVI Itajur, XXIX Jalki Hill Pugoda	Sirsála, XXVI Rájur, XXIX Polsi	Sirsila, XXVI Rájur, XXIX Sarola	Palsi Rájur, XXIX Sarola	Sarola Sirsála, XXVI Yoda	Palsi Sirsíla, XXVI. Moda	Sarola Rájur, XXIX Sillöd
of olg:	oN icitT	191	192	193	194	195	196	161	198	199	. 200	201	202
olite b	poot'l' su	Inch 15	:1 ~	:73	:1-	72	15	15	· 12 r	15	12.7	:1.	, <u>1</u> 2;
	Miles	062.42 200.61 944.12	14.454 26.073 19.002	14.454	27.020 19.002	10.898 6.607 14.454	33.218 35.534 24.987	33.218 4.032 31.802	3.853 6.183 4.032	5.262 21.931 27.024	5.262 10.086 14.454	3.850	23:648 29.743 27.024
Distance	Feet	114821 100329 144094	76316 137664 100329	76316 58298 93096	57542 142663 100329	57542 34887 76316	175393 187618 131933	175393 21288 167913	20341 32647 21288	27784 115796 142685	27784 27784 53256 76316	20329 39612 21288	124861 157043 142685
	Log. feet	5.060023 5.001429 5.158644	4.882617 5.138820 5.001429	4.882617 4.765655 4.968930	4.759985 5.154312 5.001429	4.759985 4.542661 4.882617	5.244012	5.244012 4.328125 5.225085	4.308367 4.513843 4.328125	4.443802 5.063696 5.154379	4.726372	4.308124 4.597824 4.328125	5.096427 5.196018 5.154379
Corrected	Plane Anglo	52 23 29 43 48 20	101 31 51 45 34 8	38 40 54	127 IO 3 34 5 3	25 38 12 108 49 56	63 49 I	107 12 22 66 8 10	37 19 45 103 16 45	3.7 12 13 6 39	13 57 50 27 33 3	17 26 17	48 56 59 71 31 57
			h.s.	h.8.	h.s.	h.s.	h.B.:	h.g.	h.B.		. II.8.	h.s.	,
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	Station	Siraila, XXVI Valvādi, XXIII Antūr IIIII Port	Antúr IIIIl Fort Sirsála, XXVI Sayangi	Páchora Sirsála, XXVI Savangi	Antúr IIII Fort Sirsála, XXVI Kulah	Savangi Sirsala, XXVI Kulah	Rajur, XXIX Pophla, XXVIII Glatumbri	Sirsala, XXVI Pophla, XXVIII Glaftumbri	Siradla, XXVI. Glatumbri Ausa Hill Fort	Dhanvar, XXIV Sirsila, XXVI Jarandi Hill Pagoda	Savangi Siredia, XXVI Jarandi Hill Pagoda	Sirsála, XXVI Ghátumbri Baitalrádi Fort	Dhanrár, XXIV Sireála, XXVI Jaola Hill Peak
10	o .o.V. gnaisT'	179	180	181	182	183	18.1	185	150	187	188	189	190

ije i				A	Distance		olito					, a	Distance		
o .oV gasixT	Station		Corrected Plane Anglo	Log. feet	Feet	Miles	oboorlT osen	No. O AndirT	Station	Plano Angle		Log. fect	Feet	Miles	boorl'I'
203	Sirsála, XXVI Rájur, XXIX Siljöd	zi.	0 1 " 4 20 33 3 31 49	5.033595 4.943805 5.291031	.34 108043 87863 195448	20.463 16.641 37.017	Inch 15 "	215	Kanad Sátmála, XXVII Andaner Peak	7 3	\$ 0 iC	1.255944	18028 17556 35258	3.324	Inch 7 15
70.7	Palsi Sillöd Sindphal Hill Pagoda	h.s. s.	83 57 o 53 33 55	4.841234 4.749204 4.673216	69380 56131 47121	13.140 10.631 8.924	r :	216	Jandi Sátmála, XXVII Andaner Peak	24 46	9 38 4 0 4 4 4	4.255944 4.501897 4.617729	18028 31761 41470	3.414 6.015 7.854	7 15
205	Sillöd Palsi Undangaon Hill Tree	h.s.	96 8 16 44 4 35	4.864594 4.709461 4.673216	73214 51223 47121	13.866 9.701 8.924	2.2	21,7	Jamdi Kanad Andaner Masjid "	8. 33.23 53.59	<u> </u>	1.155274 1.322651 1.414269	14298 21021 25958	2.708 3.981 4.916	7 :
206	Sarola Palsi Undangaon Hill Treo	h.s.	79 0 51 27 49 54	4.864594 4.541828 4.853579	73214 34820 71380	13.866 6.595 13.519	2 2	218	Jamdi Kanad Mundyádi Peak	8. II5 36	35	4.542624 4.165667 4.414269	3484 14644 25958	6.607	
207	Sarola Silibd Bhokardhan Tower	h.s. 8.	46 27 25 97 5 10	4.552817 4.689235 4.466511	35712 48892 29276	6.764		219	Sátmála, XXVII Jamdi Damangaon Hill Pagoda	72 5 80 1	25.	1.941945 1.955328 1.617729	87487 90225 41470	16.570 17.088 7.854	15
208	Palsi Siliöd Nirud Tower	h.s.	61 21 20 33 37 55	4.618166 4.418261 4.673216	41511 26198 47121	7.862 4.962 8.924	= =	220	Pophla, XXVIII Rájur, XXIX Dongargaon Hill Pagoda No.	1 15 1	8 8	.226456 .727329 .120354	168444 53374 131933	31.902 10.109 24.987	15
209	Palsi Moda Upli Pagoda	h.8.	78 43 5 37 0 20	4.570595 4.358588 4.533745	37204 22834 34178	7.046 4.325 6.473	2 2	122	Pophla, XXVIII Rájur, XXIX Dongargaon Hill Pagoda No.	82 24 11 43	13 4 5	.117659 .429265 .120354	131117 26870 131933	24.833 5.089 24.987	= =
210	Yerúl, XXX Poplila, XXVIII Rail	h.s.	94 39 11 39 34 21	5.188382 4.993992 5.045093		29.225	15	222	Pophla, XXVIII Yerdi, XXX Waragaon Hill Tomb	34 12 14 14 14	35	4.920881 4.561924 5.045093	83345 36469 110941	15.785	
211	Sátmála, XXVII Pophla, XXVIII Rall	т. я.	74 0 16 14 35 41	5.188382 4.606897 5.205401	154306 40448 160473	29.225 7.661 30.393	2.2	223	Pophla, XXVIII Yerdi, XXX Bondagaon Hill Tree	21 57	28	4.836882 4.682567 5.045093	68688 48147 110941	13.009	::
212	Sátmála, XXVII Yerúl, XXX Jamdi	h.s.	41 58 55 15 26 52	5.017619	104140 41470 131205	19.724 7.854 24.849		224	Pophla, XXVIII Yordi, XXX Ganori Peak	18 41	4 m	4.860892 4.621180 5.045093	72593 41800 110941	13.749	
213	Sátmála, XXVII Yerúl, XXX Deher Hill Tomple		76 35 12 33 49 44	5.134112 4.891756 5.117950	136180 77939 131205	25.792	2 2	225	Pophla, XXVIII Yerdi, XXX Golagaon li.s.	7 1	12	4.702465 4.787357 5.045093	50404 61285 110941	9.546	* *
214	Sátmála, XXVII Janati Kanad	h.s.	38 29 5 57 42 3	4.414269 4.547260 4.617729	25958 35258 41470	4.916 6.678 7.854	7.	226	Yerdl, XXX Golngaon Guddans Hill Pagoda	g. 21 30 60 20	35	4.271138 4.645879 4.702465	18670 44246 50404	3.536 8.380 9.546	15

* Deduced base.

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eti[o]	Theor	Inch 15	* *	-73	::	::	- 25	;; ;		7.	127	(a a	. : /.: \
	Miles		10.78z 5.064 11.338	15.434 7.295 18.159	15.434 25.418 29.412	7.161	7.196 21.196 18.159	21.162	0.401 7.460 7.196	6.966 9.956 7.460	094.4 451.9 696.z	18.157 24.992 11.338	961.4
Distance	Feet	59880 59863 131933	56929 26737 59863	81493 38516 95880	81493 134207 155297	37809 167789 131933	37993 111917 95880	37993 145782 155297	2432 39389 37993	36783 52567 39389	15676 32494 39389	95872 131956 59863	36905 25918 37993
	Log. feet	4.777159 5.120354	4.755336 4.427117 4.777159	4.911123	5.127775 5.127775 5.191164	5.224764	4.57970c 5.048898 4.981727	4.579700 5.163704 5.191164	3.385947 4.595374 4.579700	4.565643 4.720716 4.595374	4.195245 4.511850 4.595374	4.981690 5.120432 4.777159	4.267084
Corrected	Plano Anglo	41 40 56 24 31 54 10	70 42 35 26 18 50	56 52 59 23 19 8	31 38 29 59 45 41	\$ 37 t5	705 I 44 55 49 56	14 2 29	53 30 0	44 20 18	22 41 43	41 39 5	67 30 50
		Jr.s.	h.s.	h.s.			h.s.	No. 1 h.s.	No. 1 h.s. No. 2, .,	No. 2 h.s.	No. 2-h.s.	p.a.	No. 1 h.s.
, activity		Pophla, XXVIII Rájur, XXIX Muramba	Pophla, XXVIII Muramba Kankura Hill Treo	Muramba Rájur, XXIX Nandkhed Hill Tomb	Jámkhed, XXXI Rájur, XXIX Nandkhed Hill Tomb	Pophla, XXVIII Rájur, XXIX Pallaskhed Hill Treo	Muramba Rájur, XXIX Málágaon N	Jámklied, XXXI Rájur, XXIX Málágaon	Rájur, XXIX Máligaon Máligaon	Rájur, XXIX Málágaon Wadona Penk	Rájur, XXIX Málágaon Dougaou Hill Dipmal	Pophla, XXVIII Muramba Rájur Hill Tomple	Rajur, XXIX Malagaon Damungaon
30 elga	.oN Tria	230	540	142	242	213	214	2-15	546	217	84-2	219	250
	oon,,	Inch 15	: :1~	15	= 2	25-	. .	15	r.22.r.	15	8.2		55 er-
	Miles	33.430 8.412 38.898	31.500 10.653 38.898	31°523 10°579 38°898	31.523 10.484 27.861	15,209 33,508 27,861	15.200	3.140	3.140	32.347 38.820 31.213	28.541 8.286 32.377	20.276	18.159 18.317 29.412
Distance	Fock	176508 44415 205384	166321 56247 205384	166441 55855 205384	166441 55356	80303 176924 147108		16577 36868 50404	16577 26472 32617	170792 204968 164803	150696 43748 179949	107059 37070 110941	95880 96715
	Log. feet	5.246765 4.647533 5.312566	5.312566	5.221269 4.747062 5.312566	5.221260 4.743166 5.167637	5.247788	4.513443 4.513443 5.045093	4.219513	4.4219513	5.232467 5.311685 5.216964	5.178102 4.640960 5.232866	5.029621 4.569021 5.045093	4.081727 4.985493 5.1505
Corrected	Plano Angle	44 33 25 10 10 8	40 3 36 12 34 16 127 22 8	39 54 23	100 36 19	97 48 55	16 56 19 6 47 46	12 44 43 29 33 0	30 21 43 53 38 31 95-59 46	53 41 36 75-15 55	55 42 13	74 20 14	36 4 41 36 26 33 107 28 46
			11.8,			, . h.s.	i.a.	h.B.	h.s.				,
	Blation	Yerúl, XXX Jámkhed, XXXI Godagaon Hill Poak	Yerúl, XXX Jánkhed, XXXI Jatoda	Yorul, XXX Jámkhed, XXXI Jatoda Hill Treo	Pophla, XXVIII Jánkhed, XXXI Jatoda IIII Tree	Jánskled, XXXI Pophla, XXVIII Rasulpur	Terúl, XXX Popila, XXVIII Rasulpur	Golagnon Yerul, XXX Röza	Rasulpur Yorul, XXX Röza			Poplia, XXVIII Veral, XXX Maholi Peak	Timkhed, XXXI Rajur, XXIX Muramba
218 30	.oZ. agirT	222	228	229	230	183	233		234	, <u>56</u>	38	762	238

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•	Miles	15.43	21.605 15.243 32.377	14.72	22.274 25.625 14.721	22.389 6.450 22.274	8.38	4.686 29.688 32.377	4.686 10.310 14.721	4.165 4.884 8.281	5.776 5.816 6.450	11.293 18.992 8.281	4.901 20.489 20.519
Distance	Feet	81492 48435 61179	114072 80482 170949	116306 77725 170949	117608 135302 77725	3405 11760	118214 43724 135302	247 1567 1709	24744 54439 77725	21993 25789 43724	30498 30708 34053	59625 100280 43724	25877 108179 108342
I	Log. feet	4.911117 4.685159 4.786599	5.057180 4.905701 5.232866	5.065601 4.890562 5.232866	5.070438 5.131305 4.890562	5.072669 4.532160 5.070438	5.072669 4.640721 5.131305	4.393466 5.195215 5.232866	4.735910 4.735910 4.890562	4.342291 4.411430 4.640721	4.484270 4.487252 4.532160	4.775425 5.001214 4.640721	4.412916 5.034144 5.034795
Corrected	Plane Angle	95 20 49 36 16 56	34 27 33 23 31 43	35 6 53 22 36 25 122 16 42	85 5 8 34 54 50	16 36 10 80 41 23	58 8 55 18 18 40 103 32 25	51316	7 22 29	21 51 25 52 35	55 54 5 56 29 20	16 23 38 151 39 40	82 46 45 83 29 35
		h.s.	ħ.8.	h.s.	h.s.	h.a.	h.s.	. #	h.s	h.s.	h.s.	1 h.s.	h.s.
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Station		XXXI Hill Tu	XXXIV	XXXIV	M		×	XXXIV XX d Fort F	K For	X Min	q Tomb	X 11 Pa	XXXIV
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		Kasaner Jámkhed, XXXI Pipalgaon Hill Tree	Yerúl, XX Dhaigaon, I Satúra	Yorúl, XX. Dhaigaon, d Satúra	Yerúl, Satára Toka	Satára Toka Shernapur	Yerúl, XX. Toka Shernapur	Dhaignon, XXXII Yorúl, XXX Daulatabad Fort I	Satára Yerúl, XXX Daulatabad Fort	Yerál, XXX Shernapur Daulatabad Minaret	Satára Sheruapur Aurangabad	Yorúl, XXX Shernapur Gandali Hill Pagoda N	Dhaigaon, Kasaner Varundi
io . olgu	oN airT	263	797	265	266	267	268	269	270	271	272	273	274
elite 6d		Inch 1:4 "	* * *	15	2 2	22	15	2 22	15	15	7.2	15	15
	Miles	31.587 9.126 37.676	31.587 20.335 28.136	22.757 12.187 29.412	18.673 11.485 29.412	6.112	20.378 18.317	20.519	14.825 12.594 11.587	14.825 8.523 18.317	5.820 16.969 18.317	3.252 II.796 I4.825	15.434 16.696 31.500
Distanco	Feet	166780 48183 198930	16678 10737 14855	120159 64349 155297	98596 60641 155297	32269 84104 96715	6117 10759 9671	61179 108342 164803	78275 66494 61179	7827 4500 9671	30729 89598 96715	17169 62282 78275	81492 88155 166321
	Log. feet	5.222145 4.682897 5.298701	5.222145 5.030889 5.171895	5.079755 4.808543 5.191164	4.993860 4.782763 5.191164	4.508782 4.924815 4.985493	4.786599 5.031789 4.985493	4.786599 5.034795 5.216964	4.893622 4.822785 4.786599	4.893622 4.653248 4.985493	4.487543 4.952300 4.985493	4.234743 4.794361 4.893622	4.911117 4.945248 5.220948
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1	Log. feet	5'031434 4'961410 4'814560	5.031434 5.028901 4.705475	5.070992 4.988214 4.814560	5.057424	4.982469 4.816983 4.814560	4.982469	4.998498 4.920147 4.705475	4.998498 5.113183 4.985493	+735021 +613844 4358948	4.599227 4.396066 4.358948	+.595545 +.516120 +.705475	4.595545 4.513295 4.8143695
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Stoffer	Station	Bori Júnkhed, XXXI Júlna Pagoda	Ambad Jánkhed, XXXI Jálna Pagoda	Bori Jámkhed, XXXI Jálna Hill Pagoda	Ambad · Jánkbed, XXXI Jálna Hill Pagoda	Bori Jámkhed, XXXI Rangaon Hill Pagoda	Ambad Júmkhed, XXXI Raugaon Hill Pagoda	Ambad Jámkhed, XXXI Vádagaon Hill Pagoda	Muramba Jámkhed, XXXI Vádagaon Hill Pagodn	Bori Ambad Gola Pagoda	Bori Ambad Shivga Tower	Ambad Jómkhed, XXXI Pokri Tower	Bori Limkhed, XXXI Pokri Tower
10 . olga	.oK rairP	287	288	280	290	291	202	293	29.4	295	296	297	298
	boodT ear	Inch 7	2 2	2.2		1 = =	15	14 to	£1~	15	. , :27) 12 K	2.2
	Miles	14.456 18.880 4.901	18.225	8-548	8.507	9.829	10'403 22'056 31'213	18.978	12.282 1.551 11.587	37 · 508 12 · 357 36 · 081	9.613	9.613 33.893 36.081	8.261 4.328
Distance	Feet	76328 99684 25877	78341 96228 25877	45132 63545 25877	44919 61996 25877	51895 67054 25877	54928 116458 164803	54928 100204 96715	64847 8190 61179	1980-t0 65147 190510	50755	50755 178952 190510	64683 43616 22853
	Log. feet	4.882684	4.983302	4.654483 4.803082 4.412916	1.6254.t 4.792361 4.792361	4.826422	4.739792 5.066168 5.216964	4.739792 5.000885 4.985493	4.811888 3.913308 4.786599	5.296753 .4.814560 5.279918	4.705475 4.358948 4.814560	4.705475 5-252738 5-279918	4.810793 4.639649 4.358948
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ogS	orial ganial	27.5	276	277	27.8	270	280	182	282	283	38	285	286

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	Log. feet Reet	4.499476 31585 4.564723 36705 4.814560 65247	4.499476 31585 4.497110 31413 4.705475 50755	4.417855 26173 5.217497 165005 5.167637 147108	4.417855 26173 4 5.041293 109975 20 4.985493 96715 18		1.114732 13024 1.735783 54423 1 1.814560 65247 1	4.735783 54423 1.735783 54423 1.814560 65247 1.4.338270 21791 4.3182417 20674 4.358948 22853	4.735783 5423 4.735783 5423 4.814560 65247 4.338270 21791 4.358448 22853 4.647113 44372 4.6378494 22853	4.735783 4.735783 5.443 4.735783 5.443 4.338270 4.35848 2.0574 4.647113 44372 4.64713 443093 4.674207 47229 4.674207 47229 4.674207 47229 4.76743 58485 4.76745 50755	4,735783 13024 4,735783 54423 4,735783 54423 4,338270 20574 4,358948 22853 4,647113 44372 4,64404 4332 4,674207 47229 4,7674207 47229 4,7674207 47229 4,7674207 47229 4,765475 50755 5,177636 159519 5,177636 159534 5,177636 152534	4.114732 4.335783 4.335783 4.335470 4.338270 4.358948 2.2853 4.647113 4.767423 4.767423 4.767423 4.76743 5.72994 6.76043 6.7	4.114732 4.735783 4.735783 4.338270 2.1791 4.338270 2.2853 4.647113 4.647113 4.64720 4.767420 4.76743 5.126174 1.75636 5.126174 5.126174 6.4907 6.2363 7.79918 165307 7.38229 165307 7.38250 165307 7.38250 165307 7.3350 165307 7.3350 165307 7.3350 165307 7.3350 165307 7.3350 165307 7.3350 163512 7.23512 7.23512
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	Log. feet	4.385019 4.475529 4.185272	5.279200	5.279200 4.632268 5.330639	5.279380 4.631663 5.330639	5.279380	4,249216 4,492011 4,812294	4.515338 4.573586 4.812294	4.702c00 4.812294	4.909858 5.206492 5.074503	4.838451 4.658498 4.812294	4.783396	4.941292
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Stotion motion	1011010	Tandoli Ránigaon Chándgaon Towor	Dhaigaon, XXXIV Agargaon, XXIV Adhori Hill Pagoda No. 1	Mathuri, XXXIII Agargaon, XXIV Adhori Hill Pagoda No.	Mathuri, XXXIII Kgargaon, XXIV Adhori Hill Pagoda No.	Dhaigaon, XXXIV Ágargaon, XXIV Adhori Hill Pagoda No.	Mathuri, XXXIII Sindkhed Pipla Hill Pagoda	Mathuri, XXXIII Sindkhed Kolegaon Hill Treo	Sindkhed Mathuri, XXXIII Khamkhed Hill Pagoda	Chineholi, XXIII Mathuri, XXXIII Khámkhed IIill Pagoda	Mathuri, XXXIII Sindkned Sherapur Hill Pagoda	Ránigaon Mathuri, XXXIII Bhálgaon Hill Pagoda	Chincholi, XXIII Mafluri, XXXIII Bhilgaon IIill Pagoda
វិល ពង្រព	oN chT	335	336	337	338	330	340	341	342	343	354	312	3.16
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	Miles	5.146 3.654 5.653	4.367 7.001 4.856	6.180 3.666 4.856	12.565 2.743 10.292	3.384	\$.087 9.167 4.856	7.678 20.12 20.189	7.678	2.60.2 196.9 \$25.8	8.312 12.523 18-302	2.549	8.351 10.278 2.902
Distance	Feet	27172 19293 29846	23060 36964 25639	32633 19355 25639	66341 14483 54344	17868 18268 25639	42699 48400 25639		40538 128015 118714	45008 36753 15320	43887 66122 96636	. 8984 13459 15320	44095 54266 15320
H	Log. feet	4.434118 4.285408 4.474884	4.362850 4.567779 4.408908	4.286793	4.821784 4.160862 4.735148	4.252073 4.261693 4.408908	4.630413 4.684842 4.408908	4.607864 5.057605 5.187854	4.607864 5.107263 5.074503	4.565294 4.565295 4.185272	4,642337 4,820344 4,985140	3.953478 4.128998 4.185272	4.644389 4.734531 4.185272
Corrected	Plano Angle	62 53 45 39 12 12	38 4 56 98 37 10	91 53 56 36 21 20	141 52 4	44 10 37 45 26 15	61 41 49 86 23 10	30 to 30 to	18 25 3 93 52 54	113 0 45 48 43 45	23 45 30 35 39 0 121 35 30	35 38 30 60 48 0	42 I 30 I243I 30
		8.8	ĸ.	, t c	h.s.	ei	¢ť.	I.s.		1.8.	Ь.В. .я.	р.в.	F.8.
ı	Station	Chincholi Pimpri Gliregaon Tower	Dhaigaon, XXXIV Pimpri Siragaon Tower	Dhaigaon, XXXIV Pimpri Karegaon Tower	Dhaigaon, XXXIV Chineholi Serátta Tower Tree	Dhaigaon, XXXIV Pimpri Ninbgaon Tower	Dhaigaon, XXXIV Pimpri Joharapue Towoe	Dhaigaon, XXXIV Mathuri, XXXIII Ilinigaon	Chineboli, XXIII Mathuri, XXXIII Ránigaon	Tandoli Ranigaon Nimbgaon Pagoda	Notjai Tandoli Somtána	Tandoli Ránigaon Antarvali Pagoda	
1	· · · · · · · · · · · · · · · · · · ·	1		, F3	326	327	328	320	330	331	332	333	331
0]: 3	o .o.K gaariT	323	324	325	8	64	, gg ,	. č		es '	<i>C</i> 3	es '	ಣೆ

30 61gr		Corrected		Distance		olito	lo elga	nv;1090		Corrected		Distance		
.oN rainT	попра	Plano Anglo	Log. feet	Feet	Miles	00sdT 2u	oM airT	Cration		Plano Anglo	Log. feet	Fect	Miles	oostlT est
2FE	Mathuri, XXXIII Rúnigaon Púrgaon Tower	20 0 32 23 19 30	4.305619 4.369018 4.607864	20212 23389 40538	3.828 15 4.430 7 7.678	Inch 15 7	350	Chincholi, XXIII Mathuri, XXXIII Tarkha	h.s.	55 1 59 4.988050 35 17 38 4.836265 89 40 23 5.074503	4.988050 4.836265 5.074503	97286 68591 118714	97286 18.425 68591 12.991 118714 22.484	Inch 14
348	Mathuri, XXXIII Chincholi, XXIII Kharyandi Hill Peak	64 6 35 17 32 40	6 35 5.033191 32 40 4.558335 5.074503	36169 118714	107942 20.444 36169 6.850 118714 22.484	15	351	Dhaigaon, XXXIV Mathuri, XXXIII Tarkha	h.s.	37 37 35 4 '988050 67 5 56 5 166701 75 16 29' 5 187854	4.988050 5.166701 5.187854	8 97286 18.425 146791 27.801 154118 29.189	18.425 27.801 29.189	
849	Mathuri, XXXIII Bánigaon Hukarda Pagoda	88	49 27 4.663813 39 40 4.358395 4.607864	46112 22824 40538	8.733 4.323 7.678	-22	352	Chincholi, XXIII Ágargaon, XXIV Netjai Hill		18 18 56 18 5 54	18 18 56 4.945994 18 5 54 4.940988 5.222223	88307 87295 166810	88307 16.725 87295 16.533 166810 31.593	15

Norg.-Stations Chincholi XXIII and Ágargaca XXIV appertain to the Bombay Longitudinal Series of the Southern Trigon.

December, 1892.

J. ECCLES, In charge of Computing Office.

KHANPISURA MERIDIONAL SERIES.

AZIMUTHS OF SURROUNDING STATIONS AND POINTS AT PRINCIPAL, PRINCIPAL-AUXILIARY AND SECONDARY STATIONS.

The following table contains, in the first column, the name of each Principal, Principal-Auxiliary, or Secondary Station, at which azimuths of surrounding Points have been measured; immediately followed by those azimuths. The second column contains the number of the triangle which gives the distance between the Station and the Point.

Name of Station with Azimuths	of surrounding Points	No. of Triangle giring Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
Agargaon, XXIV Chincholi Hill Dipmal Chincholi Dhaigaon, XXXIV Adhori Hill Pagoda No. 1 Adhori Hill Pagoda No. 2 Mathuri, XXXIII Netjai Netjai Hill Chincholi, XXIII	208 0 19 h.s. 208 27 54 224 28 23.77 259 56 3 259 56 30 270 3 10.74 284 53 43 285 26 25 303 32 19.36	322 317 46 336 338 46 314 352 47	Ambad h.s. Mathuri, XXXIII Dundgaon Mosquo 55 23 51 Jámkhed, XXXI Sirádhön Towor 165 1 59 Pokri Tower Párner Tower Gola Pagoda Jálna Pagoda Jálna Pagoda Shivga Tower Raugaon Hill Pagoda Pagoda 204 30 24 Jálna Pagoda 205 35 3 Jálna Hali Pagoda Shivga Tower Raugaon Hill Pagoda 213 14 4 Raugaon Hill Pagoda	285 306 284 300 297 304 295 288 290 296 292
Áhirmal, XXXII Mathuri, XXXIII Jámkhed, XXXI Chaoradongar Rájur, XXIX	55 39 41 98 107 19 6 82 h.s. 146 35 59 157 54 25 66	43 42 251 42	Vádagnon Hill Pagoda 221.31 27 Kálágnon Pagoda 230 4 19 Bori h.s. 248 33 44 Rui Pagoda 320 20 24 Ambáh h.s. Singárchori, XV 48 36 3	293 286 284 305
Ajnád, XXII Laling Hill Templo Anakvádi, XXV Varjári Hill Bibákuvar, XX Jalálabad, NIX Tasdin Hill Templo No. 1 Tasdin Hill Temple No. 2 Ārgaon, XXI Dhanvar, XXIV Valvádi, XXIII	29 32 0 31 41 42 21 132 2 54 156 50 34 95 222 46 25 98 237 30 40 237 31 30 270 40 21 23 309 15 32 56 346 48 57 60	161 34 139 27 27 141 143 28 32 30	Mhow Church E. 92 39 20 Harnása, XII 130 25 31 Anakvádi, XXV Songír h.s. 196 0 25 Ajnád, XXII 211 34 12 76 Dhár 227 7. 29 Laling Hill Temple 237 13 0 Bahádurpur 247 38 22 Kaukráj 248 11 59 Valvádi, XXIII 275 14 9 36 Junvána Hill Peak 277 55 50	112 113 112 166 34 165 160 163 163 34 170

Note .- Stations Chincholi XXIII and Agargeon XXIV appertain to the Bombay Longitudical Series.

Name of Station with Azimuths of s	urroi	unding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrou	ınding P	oints	No. of Triangle giving Distance
Anakvádi, XXV—(Contd.)] Arvi Peak Sátmála, XXVII		0 1 H 292 43 4 317 52 49°16	172 35	Bargar h.s. Dhamnár, II Nigrun, III Lohári, VI	0 197 5 246 317 1	7 16	68 68 69
Anjar h.s. Abapuri Hill Pagoda Chakeri	8.	0 39 43 255 53 13	133 133	Báwangaz, XVIII Bori Hill Penk Gumánpur, XVI Vntli h.s.		6 52 6 22·77	136 22 120
Árgaon, XXI Valvádi, XXIII Ajnád, XXIII Ajnád, XXII Khandra Hill Bábákuvar, XX Tasdin Hill Temple No. 2 Tasdin Hill Temple No. 1 Jalálabad, XIX Sátpuda Hill Peak Dhanvár, XXIV		29 35 15 23 90 50 55 04 98 42 53 116 33 19 78 149 26 48 149 28 57 162 25 19 85 264 11 2 350 43 55 64	30 28 140 29 144 142 28 145 31	Mograba, X1V Songarh Peak	228 234 5 255 4 266 5 301 1 301 2 321 1	0 38.57 3 5 0 1 1 42.71 9 22 22 44.22 15 24 19 29.07	122 126 131 23 132 24 134 25 137
Bábákuvar, XX Varjári Hill Bori Hill Peak Naktimáta Peak Báwangaz, XVIII Thíkri, XVII Jalálabad, XIX Tasdin Hill Temple No. 1 Ärgaon, XXI Khandra Hill Ajuád, XXII		2 46 5 160 17 9 166 25 44 171 50 50 60 227 32 28 29 259 28 47 50 278 56 53 296 19 54 05 316 59 21 336 47 46 96	139 136 137 25 26 25 141 29 140 27	Bori h.s. Mathuri, XXXIII Ambad hill Pagoda Jámkhed, XXXI Sirádhôn Towor Párner Tower Pokri Tower Shivga Tower Gola Pagoda Jálna Pagoda Jálna Pagoda Jálna Hill Pagoda Raugaon Hill Pagoda Kálágaon Pagoda	68 3	50 9 4 59 8 20 1 24 16 54 8 5 4 22	283 284 303 283 299 304 298 296 295 287 289 201 286
Bahádurpur h.s. Anakvádi, XXV Laling Hill Temple Valvádi, XXIII		67 45 12 69 37 54 316 28 47	168 167 167	Rui Pagoda Búda, XXI Bálágara, XXIV	350 3 68 1	4 49 77	305
Bálágara, XXIV Barkhera Hill Bush Búda, XXI Sítamau, I Digau Dhamnár, II	h.s.	4 13 49 248 10 32 62 292 1 43 09 299 37 52 328 28 15 62	49 1 3 51 1	Sítamau, I Dhamnár, 11 Budapura h.s. Loltári, VI Kaula-ka-Máta, XI	318 2 357 4 216 5 313 2	22 31 33 46 23 46 3 45 8 56	2 1 82 82 82
Baloda s. Semlia Jalodia Kaula-ka-Máta, XI Karsod, 1X Kwála Nagora		23 15 45 59 58 3 141 46 17 229 16 38 299 39 33 341 29 57	93 98 91 91 92 95	Chakeri s. Abapuri Hill Pagoda Bawangaz, XVIII Anjar h.s. Songarh Poak	75 4	5 25 5 15 3 55 5 15	132 131 133 131
Bámbrud h.s. Varod Páchora		219 14 39 242 46 49	177 177	Chaoradongar h.s. Jámkhed, XXXI Rájur, XXIX Ahirmal, XXXII	27 4 200 3 326 3	0 16 3 29 0 34	252 251 251

Name of Station with Azimuths of sa	rrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points
Chincholi, XXIII Agargaon, XXIV Netjai Hill Netjai h Tarkha Dhaigaon, XXXIV Tandoli Ránigaon Kharvándi Hill Peak Mathuri, XXXIII Bhálgaon Hill Pagoda Khánkhed Hill Pagoda	174 35 40.00	47 352 314 350 48 318 330 318 47 346	Dhaigaon, XXXIV—(Contd.) 0 10 10 10 10 10 10 10 10 10 10 10 10 10
Khámkhed Hill Pagoda Chincholi h.s. Agargaon, XXIV Ghiregaen Tower Sovátta Tower Tree Dhaigaon, XXXIV Pinapri Notjai	248 28 6	317 323 326 316 321 316	Satúra No. 2
Damangaon s. Rájur, XXIX Málágaon No. 1 h	204 24 10 .s. 276 25 50	250 250	Tandeli ,, 331 56 33 81 Chincheli, XXIII 354 34 37 31 35 35 21 23 85 35 21 23 85
Nigrun, III Nigrun, III Kauthária Hill Tree Pátan Dharakpur Hill Tree Dudbála, IV Mehdpur Flag-staff Mehidpur Dulet Temple Mehidpur Tomb Karai Pagoda	56 50 22 80 62 13 37 104 12 3 32 104 12 3 32 107 0 13 108 35 28 39 160 40 21 11 180 33 3 181 34 35 208 22 48 209 14 30 90 244 40 12 250 42 58 252 24 14 265 43 19 .8. 271 31 11 354 59 9 98	9 83 73 72 70 8 6 60 59 6 75 77 80 74	Dhalmu h.s. Gurla, VIII 107 16 2 38 19 31 5 5 5 5 5 5 5 5 5
Dewis Hill Templo Nagda Hill Guraria Hill Peak Dhaigaon, XXXIV	42 52 31 109 13 22 123 56 36 18. 148 15 57 201 26 42 204 4 32 264 22 47 18. 12 59 11 13 22 23 39 55 35	102 102 107 103 101 105 106	Diamora, VII

Noze.—Stations Chincholi XXIII and Agargaon XXIV appertain to the Dombny Longitudinal Series.

Stations Buda XXI and Balagara XXIV appertain to the Karachi Longitudinal Series:

Name of Station with Azim	uths of surrou	nding Points	Na. of Triangle giving Distance	Name of Station with Azimuths	of surron	anding Points	No. of Triangle giving Distance
Dhanvár, XXIV—(C Páchora Sámner Valvádi, XXIII Jalka Peak Padmála Páldhi Ajnád, XXII Árgaon, XXI	h.s.	69 56 4.78 81 51 59 85 29 9 129 26 36 129 27 35.65 170 45 30.91	174 154 31 150 149 147 32 31	Gumánpur, XVI Ambáhpani Hill Temple Báwangaz, XVIII Indráwan, XIII Kapátal Dhutni Peak Lálgarh Hill Pagoda Mograba, XIV	h.s.	0 17 59 1 56 52 19 230 39 0 30 249 57 55 291 24 1 293 36 22 295 57 21 87	135 22 21 96 123 121 21
Manvel Sătpuda Hill Peak Dohori Jamner Hill Peak Kekatnimbhora Jaola Hill Peak Dhâr h.s.	h.s.	184 15 33 280 45 13 296 29 56 304 0 47 322 19 12	148 146 151 153 152 190	Gurla, VIII Karsod, IX Bereha Hill Tree Dhanora, VII Deo Dongri, V Karai Dhalmu Jalálkheri, X Lupára	h.s.	32 17 51'38 79 20 47 86 15 29'14 174 59 30'77 207 23 52 287 13 22 287 13 21'71 354 28 27	11 85 10 10 74 87 14 88
Laling Hill Templo Anakvádi, XXV Kankráj	h.s.	45 55 53 47 14 41 345 42 27	164 165 164	Harnása, XII	"		125
Digau h.s. Dhamnár, II Bálágara, XXIV Sítamau, I		7 2 18 119 43 3 280 27 12	50 51 50	Nálchha Hill Dargah Mograba, XIV Dhár Hill Pagoda No. 1 Indráwan, XIII Kwála Karsod, IX Jalálkheri, X Reuti		19 18 38 27 42 35 17 52 13 41 93 42 39 67 135 16 5 160 25 39 51 199 44 26 97 266 47 25	18 118 17 89 15 15
Dohori h.s. Sirsála, XXVI Dhanvár, XXIV		30 35 33 100 48 18	151 151	Nenod Hill Tree Deogurária Rála Mandíl Hill Peak Machla Hill Peak Machla Hill Templo	"	282 44 35 289 4 34 292 58 57 302 42 27 304 32 31	101 102 108 109 111
Dudhála, IV Deo Dongri, V Nigrun, III Tarauli Párlia Sítamau, I Gualed Hill Tree	h.s.	29 20 24 24 76 24 59 44 107 18 3 109 33 57 114 23 4 08 147 7 43	6 5 57 53 5 5 55	Ambáh Singárchori, XV Indráwan, XIII Kapátal Gumánpur, XVI Shergarh Jalodia	h.s. s. h.s.	310 18 40 343 26 0 80 28 31 56 50 46 6 38 138 43 55	112 19 96 21 97 99
Ghátumbri h.s. Pophla, XXVII Sirsála, XXVI Ausa Hill Fort Baitalvádi Fort Rájur, XXIX		12 38 28 78 46 38 •182 3 23 223 3 3 330 11 5	184 185 186 189 184	Kaula-ka-Máta, XI Semlia Karsod, IX Nagora Harnása, XII Mograba, XIV		210 31 28 217 19 2.10	16 94 16 94 17 18
Golagaon, h.s. Yorúl, XXX Rŏza Guddana Hill Pagoda Pophla, XXVIII	h.s.	70 56 21 83 41 4 131 16 41 264 16 27	225 233 226 225	Jadgaon h.s. Kasaner Muramba Yeklerwar Hill Dipmal Jámkhed, XXXI	h.s.	11 10 36 222 11 6 303 5 34 322 0 14	258 259 261 258
Gosainbaira h.s. Thikri, XVII Singárchori, XV		44 26 18 209 22 19	130 130	Jalálabad, XIX Tasdin Hill Temple No. 2 Ajnád, XXII Bábákuvar, XX		3 25 33 42 54 20·12 79 39 33·91	143 27 25

	1 29) <u>E</u>
Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of
alálabad, XIX—(Contd.) Bijagarh Hill Fort Báwangaz, XVIII Thíkri, XVII Sátpuda Hill Peak Argaon, XXI 342 323 344	95 24 33 24 145	Jámkhed, XXXI—(Contd.) 0 <td>20 20 20 20 20 20 20 20 20 20 20 20 20 2</td>	20 20 20 20 20 20 20 20 20 20 20 20 20 2
nlálkheri, X Harnása, XII 19 47 56 Karsod, IX 75 56 21 Lupára h.s. 104 46 3 Gurla, VIII 130 16 54 Dhalmu 158 20 23	10 14 88	Ahirmal, XXXII 287 10 48 55 Bori h.s. 290 53 24 Ambad Hill Pagoda 297 51 30 Ambad 33 33 25 Talváda Hill Pagoda 333 33 25 Gevrái Hill Pagoda 353 40 36 Sindkhed 359 10 55	30 20 30 30 30 30 30 30 30 30 30 30 30 30 30
alodia h.s. Shergarh	99 98 98 99	Jatoda h.s. Yerûl, XXX Jamkhed, XXXI Pipalgaon Hill Tree Kanad h.s.	222
amdi h.s. Mundvádi Poak Sáttnála, XXVII Andaner Poak Andaner Masjid Kanad Damangaon Hill Pagoda Yerúl, XXX 159 41 31 217 36 3 241 45 41 h.s. 275 18 6 340 10 16	218 212 216 217 214 219 212	Jamdi h.s. 95 19 40 Mundvádi Peak 117 34 20 Andanor Masjid 149 19 20 Andanor Peak 171 16 32 Sátmála, XXVII 179 8 32 Kankráj h.s. Anakvádi, XXV 68 20 4 Laling Hili Tomplo 69 58 17 Dhár h.s. 165 43 20 Valvádi, XXIII 330 48 13	22222
áimkhed, XXXI Appagaon Pagoda 6 18 33 Mathuri, XXXIII 17 49 11 Dhaigaon, XXXIV 68 36 12 Kasauer h.s. 86 43 20 Parundi Hill Pagoda 92 0 36 Yorúl, XXX 122 15 33 Yerúl Hill Treo 122 17 48 Pipalgaon Hill Tree 122 17 3 2 Godagaon Hill Peak 132 25 42 Jatoda Hill Tree 134 41 31 Jatoda Hill Tree 134 49 50 Jadgaou 147 10 38 Jaipur Hill Dipmal 147 10 38 Jaipur Hill Treo 150 51 47 Pophla, XXVIII 153 46 23 Nandkhed Hill Tomb 150 51 47 Sontána Hill Dipmal 168 17 53 Rohillagada Hill Peak 199 56 52 Rajur, XXIX 205 25 52 Kalgaon Hill Pagoda 215 23 18 Malagaon No. 1 219 27 42 Jálna Pagoda 232 55 56 Jálna Hill Pagoda 233 55 56 Jálna Hill Pagoda 235 9 29	85 44 256 280 41 235 262 281 227 228 258	Kapútal h.s. Gumánpur, XVI 70 2 50 Shergarh B. 192 52 9 Indráwan, XIII 208 29 45 Karai h.s. Gurla, VIII 27 25 53 Deo Dongri, V 91 33 33 Dulet Templo 163 34 5 Mehidpur Flag-staff 195 30 43 Mehidpur Flag-staff 8. 201 44 33 Mehidpur Tomb 210 8 18 Karsod, IX Kwála B. 8 21 28 Indráwan, XIII 37 24 48 90 Baloda 74 9 20 5 Kaula-ka-Máta, XI 94 6 56 28 Bercha Hill Tree 123 36 52 Dhanora, VII 135 50 11 Gurla, VIII 212 14 50 50	

Name of Station with Azimuth	s of Surrounding Points	No. of Triangle giving Distance	Name of Station with Azimuths of	surrounding Points	No. of Triangle giving Distance
Kasaner h.s. Dhaigaon, XXXIV Gedaida Dipmul Dhánura Pagoda Bhir Kingaon Pagoda Parola Idgah	58 25 46 96 39 1 100 48 1 102 15 46 105 30 31	257 279 276 278 277 275	Lohári, VI—(Contd.) Parnaji Pagoda No. 1 Parnaji Pagoda No. 2 Dhanora, VII Kaula-ka-Máta, XI	293 53 51 294 I I 334 42 14·23 351 41 36·72	72 73 9 12
Walauj Pagoda Varundi Pipalgaon Hill Tree Jadgaon Muramba Rohillagad Hill Peak Jámkhed, XXXI	h.s. 141 12 31 171 18 56 ,, 191 9 52 ,, 203 36 29 259 59 50 266 39 45	274 263 258 256 282 256	Lupára h.s. Gurla, VIII Jalálkheri, X	174 28 39 284 42 43	88 88
Kaula-ka-Máta, XI Jalodia Budapura Pancher Hill Pagoda Lohári, VI Jhar Hill Tree Bercha Hill Tree	h.s. 4 54 15 " 133 35 4 156 33 5 171 43 18 72 195 24 36 207 16 12	84	Málágaon No. 1 h.s. Jámkhed, XXXI Muramba Damangaon Rájur, XXIX Málágaon No. 2	39 33 12 h.s. 81 5 36 s. 96 28 2 136 55 32 h.s. 260 28 34	245 244 250 244 246
Dhanora, VII Karsod, IX Kwála Baloda Semlia Indráwan, XIII	208 41 18.15 274 0 47.40 8. 312 20 47 321 43 35 343 54 40 357 38 55.30	13 90 91 93	Málágaon No. 2 h.s. Málágaon No. 1 Rájur, XXIX Dougaon Hill Dipmal Wadona Peak	h.s. 80 28 43 133 58 43 187 5 3 221 11 13	246 246 248 247
Kekatnimbhora h.s. Sirsála, XXVI Dhanvár, XXIV Jámner Hill Peak	28 II 44 124 2 57 286 12 2	152 152 153	Manvel s. Dhanvár, XXIV Páldhí	1 32 5 h.s. 36 38 25	148 148
Kulah h.s. Sirsála, XXVI Autúr Hill Fort Savangi	22 27 36 56 32 39 h.s. 131 17 32	182 182 183	Mathuri, XXXIII Bhálgaon Hill Pagoda Chincholi, XXIII Hukarda Pagoda Tarkha Āgargaon, XXIV	22 54 34 39 25 43.64 44 29 11 h.s. 74 43 22 90 15 24.58	345 47 349 350 46
Kwála s. Baloda Kaula-ka-Máta, XI Karsod, IX Harnása, XII	8. 119 42 20 132 26 16 188 20 48 315 12 31	92 90 89 89	Kharvándi Hill Peak Párgaon Tower Tandoli Ránigaon Adhori Hill Pagoda No. 1 Adhori Hill Pagoda No. 2 Dhaigaon, XXXIV	103 32 19 113 18 6 120 6 37 133 18 38 141 26 59 141 31 35 141 49 17 62	348 347 318 329 337 338 45
Lohári, VI Pancher Hill Pagoda Budapura Bargar Bhátkheri Hill Tree Bhátkheri Hill Pagoda Kachner Hill Tree Dhamnár, II Nigrun, III Deo Dongri, V Parnakheri	h.s. 25 2 21 h.s. 36 58 11 , 137 17 20 158 51 21 160 16 3 180 38 20 189 26 51 11 237 56 10 00 288 24 54 74 , 290 33 49	7	Jámkhed, XXXI Ambad Rakshnsbáhnn Bori Ahirmal, XXXII Talváda Hill Pagoda Sindkhed Govrái Hill Pagoda Pipla Hill Pagoda Kolegaon Hill Tree Khámkhed Hill Pagoda Sherapur Hill Pagoda	197 45 49 38 8. 213 8 44 8. 215 25 33 h.s. 216 58 16 235 28 8 10 249 33 16 255 33 29 256 3 59 268 50 29 276 27 23 293 50 13 330 30 24	43 285 310 283 43 307 308 309 340 341 342 844

Name of Station with Azim	uths of surrou	anding Points	No. of Triangle giving Distance	Name of Station with Azin	nuthe of surro	unding Points	No, of Triangle giving Distance.
Mehidpur s, Karai Pagoda Karai Dulet Templo Deo Dongri, V	h.s.	16 13 2 21 45 1 63 53 30 69 0 22	80 75 79 75	Nagora s. Indráwan, XIII Semlia Baloda	g. ,,	85 29 12 128 28 59 161 31 23	94 94 95
Mhow Church s. Singárehori, XV Machla Hill Peak Ambáh Dhajára Hill Peak	h.s.	28 25 20 230 48 33 272 37 16 338 53 0	113 114 113 115	Netjai h.s. Agargaon, XXIV Chineholi Dhaigaon, XXXIV Somtana Tandoli Chineholi, XXIII	h.s. s. h.s.		314 816 315 332 332 814
Moda h.s. Palsi Upli Pagoda Sirsála, XXVI Sarola	h.s.	46 41 8 83 41 28 148 10 18 240 33 54	201 209 200 200	Nigrun, III Parnakheri Lohári, VI Bargar Bhátkheri Hill Treo Bhátkheri Hill Pagoda	h.s.	74 15 56 75 12 33	70° 7 68 66 65
Mograba, XIV Ambáhpani Hill Templo Báwangaz, XVIII Vatli Gumánpur, XVI Lálgach Hill Pagoda Indráwan, XIII Dhutni Peak Havnása, XII Asakhori Hill Tree Machla Hill Peak Nálebha Hill Dargah	h.s,	45 32 49 48 11 11 63 111 3 34 116 7 33 26 117 39 49 163 39 37 09 182 15 35 207 37 13 03 234 43 5 243 25 12 249 6 54	134 22 119 21 121 18 123 18 117 110	Pingrála Hill Pagoda Dhannár, II Sítamau, I Párlia Tarauli Gualed Hill Tree Dudhála, IV Dharakpur Hill Treo Pátan Kanthária Hill Treo Deo Dongri, V	1)	93 56 55 116 57 4 33 164 3 19 59 218 36 35 228 31 20 233 27 56 256 16 6 6 6 257 23 51 293 19 49 307 18 48 340 37 25 36	64 53 57 55 59 60 62 6
Jánapár Hill Pagoda Singarehori, XV Jánnia Hill Peak Thíkri, XVII Mohári h.s.		256 44 29 264 22 2'41 300 52 48 346 21 49:56	116 19 128 20	Páchora h.s. Sátmála, XXVII Bámbrud Varod Dhanvár, XXIV Savangi	h.s.	104 9 30 231 47 56 263 9 16	173 177 175 174 181
Vnrod Valvádi, XXIII Dhauvár, XXIV Sirsála, XXVI	h.s.	86 17 53 91 48 7 216 46 10 351 1 33	176 157 157 158	Sirsála, XXVI Padmála h.s. Dhanyár, XXIV Sirsála, XXVI		265 24 47 342 39 47	173 149 149
Muramba li.s. Parundi Hill Pagoda Kasaner Jadgaon Jaipur Hill Tree Kankura Hill Tree Pophla, XXVIII Nandkhed Hill Tomb	h.s.	42 12.51 56 52 14 101 44 40 128 3 30 184 57 41	281 256 259 260 240 239 241	Sirsala, XXVI		216 35 30 309 23 52 354 52 32	148 147 147
Rájur, XXIX Rájur Hill Temple Málágaon Somtána Hill Dipmal Vádagaon Hill Pagoda Naudi Hill Peak Jámkhed, XXXI		241 50 40 241 53 20 260 59 .0 291 28 31 299 42 28 336 45 44 349 19 26	238 219 214 255 291 802 238	Palsi h.s. Upli Pagoda Sindphal Hill Pagoda Sirsila, XXVI Undangaon Hill Tree Moda Sarola	• •	147 56 32 166 14 21 171 37 14 206 6 46 226 39 37 233 56 40	209 201 197 205 201 199

Name of Station with Azimuths of	surro	unding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points	No. of Triangle giving Distance
Palsi h.s.—(Contd.) Sillöd Rájur, XXIX Nirud Tower	8.	250 II 2I 306 30 7 311 32 41	204 197 208	Rail h.s. 0 / 11 Sátmála, XXVII 206 21 17 Pophla, XXVIII 297 45 20 Yorúl, XXX 343 31 48	211 210 210
Párlia h.s. Nigrun, III Sítamau, I Dudhála, IV		38 39 54 118 58 29 289 28 24	53 · 54 53	Rájur, XXIX Kadgaon Hill Pagoda 9 8 23 Chaoradongar h.s. 20 34 28 Damangaon s. 24 24 49 Jámkhod, XXXI 25 29 10 23 Muramba h.s. 61 55 43	254 251 250 39 238
Parnakheri h.s. Lohári, VI Nigrun, III Deo Dongri, V		110 38 16 206 26 58 286 54 3	71 70 70	Nandkhed Hill Tomb	241 88 221 220 197 195 38
Pátan h.s. Deo Dongri, V Nigrun, III Tarauli	h.s.	1 50 9 113 22 59 190 37 46	60 60 61	Sillöd B. 147 52 59 Ghátumbri h.s. 150 16 39 Undangaon 153 54 32 Sarola 159 28 0 Pallaskhed Hill Tree 245 30 47 Wadona Peak 269 36 43 Dongaon Hill Dipmal 291 15 18 Málágaon No. 2 313 57 1	202 184 192 198 243 247 248 246
Pimpri s. Chincholi Ghirogaon Tower Sirasgaon Towor Károgaon Towor Dhaigaon, XXXIV Nimbgaon Tower Tandoli Joharapur Tower	h.s.	137 36 11 156 25 36 218 41 26 255 2 46 300 29 1 319 31 35	321 323 324 325 320 327 320 328	Málágaon No. 1 ,, 316 53 59 Ahirmal, XXXII	244 42 253 310
Pophla, XXVIII		341 25 56	·	Appagaon Pagoda 101. 0 17 Sawargaon Pagoda 286 31 38 Sindkhed h.s. 347 42 58	313 311 310
Maholi Peak Kankura Hill Troe Rasulpur Jatoda Hill Tree Yerúl, XXX Golagaon Ganori Peak Bondagaon Hill Tree Waragaon Hill Tomb Rail Sátmála, XXVII Dongargaon Hill Pagoda No. 1 Dongargaon Hill Pagoda No. 2 Sirsála, XXVI Jalki Hill Pagoda Ghátumbri	h.s.	3 58 58 18 43 15 71 31 26 74 18 51 78 19 12 05 84 20 6 97 0 46 100 16 40 112 32 2 117 53 33 132 29 13 87 141 7 42 183 55 15 185 56 40 03 189 0 53 192 36 8	225 224 223 222 210 37 220 221 37 195 184	Ránigaon h.s. Chineholi, XXIII 20 59 0 Tandoli h.s. 82 54 31 Nimbgaon Pagoda 131 38 16 Antarvali Pagoda 143 42 31 Dhaigaon, XXXIV 144 48 20 Chándgaon Tower 178 17 46 Hatgaon Tower 207 26 1 Mathuri, XXXIII 313 16 57 Párgaon Tower 336 36 27 Hukarda Pagoda 342 56 37 Bhálgaon Hill Pagoda 344 9 4	330 331 331 338 329 335 334 329 347 319 345
Pallaskhed Hill Tree Rájur, XXIX Rájur Hill Tomple Muramba Nandi Hill Peak Jámkhed, XXXI	"	261 42 29 266 19 43 94 266 21 35 308 0 40 326 40 52 333 42 31 50	249 239 301	Rasulpur h.s. Yerál, XXX Rözn Pophla, XXVIII Jámkhed, XXXI Rodon State St	232 234 231 231

[·] Norg.—Station Chincholi XXIII appertains to the Bombay Longitudinal Series.

Name of Station with Azimuths	of surrounding Points	No. ot Triangle giving Distance	Name of Station with Azimuths of surrounding Points	Trinnglo giving
Routi h.s. Singárchori, XV Nenod Itill Tree Harnása, XII Dewás Hill Temple Nagda Hill Gurária Hill Peak Deogurária Indore Pagoda	21 22 36 45 23 17 86 54 7 231 2 41 243 54 51 317 43 36 h.s. 328 13 51 351 29 6	100 101 100 104 105 106 103 107	Savangi h.s.	180 181 183 188 180
Rŏza h.s. Yerúl, XXX Golagaon Rasulpur	h.s. 263 38 52 ,, 305 31 23	233 233 234	Kaula-ka-Múta, XI	93 93 94
Sámner h.s. Dhanvár, XXIV Sirsála, XXVI	238 6 9 352 20 52	154 154	Kapátal h.s. 12 53 19 Jalodia "188 18 19 Indráwan, XIII 318 42 54	99 97
Sarola h.s. Sillöd Palsi Noda Sirsála, XXVI Undaugaon Hill Treo Rájur, XXIX Bhokardhan Tower	8. 27 14 33 h.s. 54 0 10 , 60 35 53 120 32 10 133 1 1 339 25 20 349 47 8	202 199 200 198 206 198 207	Shernapur h.s. 36 15 21 Yerúl, XXX 139 47 46 Daulatabad Minaret 165 40 21 Aurangabad Tomb 259 4 38 Gandali Hill Pagoda No. 1 291 27 26 Satára No. 2 ,, 315 33 58 Sillöd s.	267 268 271 272 278 267
Satára No. 1 h.s. Dhaigaon, XXXIV Yerúl, XXX	16 36 43 13 ⁸ 37 27	261 261	Nirud Tower 36 36 8 Palei h.s. 70 14 3 Sindphal Hill Pagoda 123 47 58 Sirsala, XXVI 139 57 9 Undangaon Hill Tree 166 22 19	- 1 205
Satára No. 2 h.s. Dhaigaon, XXXIV Toka Shernapur Yerül, XXX Daulatabad Fort Flag-staff Aurangabad Tomb	h.s. 52 52 55 " 135 35 22 137 58 3 145 20 32 191 29 27	265 266 267 265 270 272	Bhokardhan Tower 304 18 55 Rájur, XXIX 327 49 31 Sindkhed h.s. Sherapur Hill Pagoda 35 58 5 Kolegaon Hill Treo 51 32 40 Pipla Hill Pagoda 63 59 55	207 202 341 341 340
Sátmála, XXVII Rail Jandi Deher Hill Templo Anakvádi, XXV Arvi Peak Junvána Hill Peak	hs. 26 22 21 37 37 35 72 13 52 138 1 50 05 139 54 19 144 35 22	171	Appagaon Pagoda 163 29 29 Rakshashahan 8. 167 43 39 Jámkhed, XXXI 178 25 9 Sawargaon Pagoda 192 35 49 Khámkhed Hill Pagoda 346 53 36	308 312 310 808 311 342
Valvádi, XXIII Páchora Antúr Hill Fort Koralla Hill Sirsála, XXVI Pophla, XXVIII Damangaon Hill Pagoda Andaner Peak Yerúl, XXX Kanad	188 16 13.70 209 46 48 229 21 27 242 35 55 246 31 10.79 312 22 4.67 324 46 26 351 28 55 355 38 39:78	35 173 178 191 36 37 219 215 40 214	Singárchori, XV Gosainbaira h.s. 29 27 3 Thikri, XVII 31 42 23 76 1	120

ইবিভাগত এই প্ৰতিষ্ঠা ভাল পাট্ট উন্নতিত প্ৰেটিছ।	eë aseass	no og grufnæ	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	วันภาพ หรื ถ้าสามาก พริกัก เรื่อ	ilmanta est a legale fing \$1 inta-	A CONTRACTOR CONTRACTOR A C
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Name of Station with Azimuths of	surro	unding Points	No. of Triangle giving Distance	Name of Station with Azimuths of surrounding Points
Valvádi, XXIII—(Contd.) Bahádurpur Kankráj Ajnád, XXII Argaon, XXI Jalka Peak Dhanvár, XXIV Bámbrud Hill Pagoda Mohári Hill Peak Mohári Sirsála, XXVI Koralla Hill Varad Antúr Hill Fort	h.s. ,,	136 32 23 150 50 34 166 52 1*21 209 27 53 73 247 25 23 249 47 13 48 261 23 44 269 54 11 271 41 51 307 32 38 54 311 44 46 329 17 36 351 20 59	167 162 30 30 150 31 155 159 157 33 191 194 178	Vatli h.s. 0 0 1 120 120 120 120 110<
Varad h.s. Valvádi, XXIII Dhanvár, XXIV Varod h.s. Bámbrud Mohári Páchora Sireála, XXVI	pre.	149 21 1 210 50 3 39 17 15 266 12 25 284 7 5 307 57 35	194 194 177 176 175 175	Guddana Hill Pagoda 229 22 55 226 Bondagaon Hill Tree 243 1 1 225 Waragaon Hill Tomb 243 58 7 222 Ganori Peak 247 34 37 222 Golagaon 350 53 30 221 Godagaon Hill Peak 257 31 51 221 Pophla, XXVIII 258 12 42 28 44 Jatoda 362 1 40 224 Jatoda Hill Tree 262 1 40 224 Rasulpur 375 9 1 23
Varundi h.s. Dhaigaon, XXXIV Gedaida Dipmal Bhir Kingaon Pagoda Parola Idgah Dhánura Pagoda Walauj Pagoda	h.s.	44 41 9 76 9 19 81 0 59 85 56 44 88 25 14 111 46 59 321 11 34	274 279 278 277 276 275 274	Malooli Peak 277 41 13 235 Mitmita Peak 297 19 37 236 Daulatabad Minaret 297 54 59 271 Daulatabad Fort Flag-staff 301 30 44 261 Jámkhed, XXXI 302 5 16*32 261 Gandali Hill Pagoda No. 1 303 22 26 271 Satára No. 2 317 54 57 261 Satára No. 1 318 34 17 26 Shernapur 319 46 4 261 Dhaigaon, XXXIV 353 1 50*33 42

December, 1892.

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CO-ORDINATES AND DESCRIPTIONS OF ALL STATIONS AND POINTS.

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Namo of Station or Point	District	Description	Latitudo North	Longitude East of	Height of Station	′
			North	Greenwich	Height of I	naugh
			0 1 11	:0 1 B	feet	1
Ahirmal Hill Mosquo	Nizam's Territory	Large mosque on a conspictious and isolated hill on which is the principal station of the same name. 1845.	1,0 33,10.1	76 6.40 4		7 ¥
						7.
Ajnád, XXII	Khándesh	Vide pago 8	21 18 49 40	75 5 0 92	0.7	27
Ambad Hill Pagoda Ambhar h. pag.	Nizam's Territory	On a conspicuous hill S.E. of the town of that name, about 4 miles 8. of Lalvádi villago, and 3 miles N. by	19 36 20 7	75 50 18-6		803
		W. of Daurgaon. 1845.				
Ambad h.s Kasarwari Stn.	13	On a conspicuous and isolated hill about 2 miles S.W. of the town of the same name. 1845.	19 35 19 34	75 48 50 41	•••	.284 .285
Ambáh Hill Pagoda H. Pag, Ambaw	Jaora State	lage of that name, about 2 miles S.E. of Harnaoda on the road from Partabgarh to Malhargarh, 4 of a mile N.W.	, ,	74.57 31 5	•)
		by N. of Sájanpura, and 1½ miles S. of Hemri villago: Western Malwa (Málwa) Agency. 1848,				134 1374
Ambáh h.s	Indoro State	lage of that name on the high road from Mhow (Man) to Khandwa, 24 miles S.W. of Datoda, and the same distance S.E. of Harsola large village: Indore (Indor)		75 53 32 16	[2387]	112
		Political Agency. 1847.	1			3
Ambáhpaui Hill Templo	Barwânî State	On a high conical hill, about 12 miles N.W. of the village of that name close to the road from Barwani to Pansenial, and 22 miles N. by E. of Kadwalia village on the Goi river: pargana Pati. Deputy Bheel Agency. 1847.		74 54 47 2		184 185
Anakvádi, XXV	F1 (- 1 - 1				2243 74	.81
Aimmyadi, AAV	Khándesh	Tide page 8_g	20 47 2.38	74 44 9 52	3.2	.i.
Andanor Masjid	Nizam's Territory	Tower. Near the large village of that name, about 21 miles N.W. of Kanad town. 1846.	20 16 26 4	75; 8 38t6		. 217
	,					1,00
Andaner Peak	n ·	About 2 miles N.E. of the large village of Andaner on the road from Kanad to Chalisgaon, and the same dis- tance N. of the former town. 1846.	20 17 17	75 10 18 ·	•••••	215 216
	,					
Andri Hill Pagoda	37	About 21 miles S.S.W. of the village so called, and 5 miles N.W. of Noigabu on the road from Aurangabad to Ajanta. 1845.	20 14 16	75 31 13		- 860 Y
						1.1
Anjar h.s. Anjer H. Paq.	BarwániStato	On a hill pagoda B. of Anjartown: Deputy Bheel Agency. 1847.	22. 2 15.6	75 546.3	[728]	133
	1,					
Autarvali Pagoda	Ahmednagar	miles E. by E. of Varur on the read to Manur, 41 miles E.W. by W. of the large village of Bodhegaon,	19 16 22 2	75 25 43 5		333
		and 1; miles N. of Kanlgaon: sub-division Shergaon. 1845.				
Autur Hill Fort	Nizara's Territory	White fower at the R. end of the hill fort. 1840.	20 25 42 6	75 16 35 9		178
	1			70.00		170

Nizam's Territory		0111			
	Spire of the large pagoda at the village of the same name on the left bank of the Godárari river, about 1½ miles W. of Pipalgaon on the road from Gevrái town, and 1 mile S.S.E. of Ballagaon. 1845.	19 22 31.3	0 / // 75 39 49 2	feet 	312 313
Khándesh	Vide pago 8	21 18 27 . 70	75 34 4 92	3129	28, 29
39	Of a conspicuous, conical hill about ½ a mile E. of the high road from Malegaon to Dhulia, and 3½ miles S. of Laling on the above named road: táluka Dhulia. 1846.	20 46 4	74 46 42	[2108]	171 172
Amjhera Stato	hill, about a mile N.W. of Asakheri village, the same distance N. of Silote, 21 miles S. by E. of Sagar town,		75 39 4	[2096]	117
Nizam's Territory			75 21 43 9		272
, ,,	Centre of building in the hill fort. 1846	20 33 58.8	75 37 23 6		186
Vjjain Stato	village so called, 3 miles N.W. by W. of the town of Ujjain. The cart road from Ujjain to Unel passes with-		75 46 3	***	•••
Khándesh	Vide pago 7_g	21 35 33 54	74 57 21 . 60	2658	25, 26
11	ed on the left bank of the Bori river, and of miles	1	75 3 27 . 66	[907]	167 168
Nizam's Torritory	Southorn tower of the fort. 1846	20 33 4.6	75 39 42.0		189
Mandsaur Stato	Vide pago 4G	24 10 21 90	75 0 15 . 84	1804	1
Dhár State	gulation of the Bhopal (Bhopál) and Malwa Topo- graphical Survey, and is about 2 miles N.W. of the village of Baloda, and 2½ miles N.E. of Gadgára on the high road from Rutlam to Indoro: Bheel Agency. When visited in 1883, the station was found to consist of a platform of mud and stones, 2 feet in		75 19 24.22	1753	91, 92
	Amjhera State Nizam's Territory Ujjain State Khándesh Nizam's Territory Mandsaur State	Of a conspienous, conical hill about \(\frac{1}{2} \) a milo E. of the high road from Mälegaon to Dhulia, and \(3\) miles S. of Laling on the above named road: taluka Dhulia. 1846. Amihera State Small tree in the centre of the conspicuous and isolated hill, about a mile N.W. of Asakheri village, the same distance N. of Silote, \(2\) miles S. by E. of Sagar town, and 4 miles S.W. of Akale close to the high road from Mhow to Rutlam (Ratlam): Bheel Agency. 1847. Nizam's Territory Largo dome of Begam bibi-ka makbara on the right bank of the Dudhna river, and close N.W. of the town of Aurangabad. 1845. Centre of building in the hill fort. 1846 On some high ground, about \(\frac{1}{4} \) a mile S.E. by S. of the village so called, \(3 \) miles N.W. by W. of the town of Ujain. The cart road from Ujain to Unel passes within a mile N.E. of the station: Western Malwa Agency. 1849. Khandesh Vide page 7—g On a hill, about 1\(\frac{2}{3} \) miles W. of the large village so called on the left bank of the Bori river, and \(0\) miles W.N.W. of the town of Párola on the high road from Dhulia to Erandel: taluka Amalner. 1846. Nizam's Territory Mandsaur State This station was originally fixed by the secondary triangulation of the Bhopal (Bhopál) and Malwa Topographical Survey, and is about 2 miles N.W. of the village of Baleda, and \(2\) miles N.E. of Gadgára on the high road from Rutlam to Indoor: Bhed Agency, When visited in 1883, the station was found to consist of a platform of mud and stones, 2 feet in	Of a conspienous, conical hill about \(\frac{1}{4} \) a mile E. of the high road from Malegaon to Dhulia, and 3\(\frac{1}{4} \) miles S. of Laling on the above named road; taluka Dhulia. Amjhera State State Mall tree in the centre of the conspicuous and isolated hill, about a mile N.W. of Asakheri village, the same distance N. of Silote, 2t miles S. by E. of Sager town, and 4 miles S.W. of Akolia close to the high road from Mhow to Rutlam (Ratlam); Bheel Agency. 1847. Nizam's Territory Large domo of Begam bibi-ka makbara on the right bank of the Dudhna river, and close N.W. of the town of Aurangabad. 1845. Centre of building in the hill fort. 1846 20 33 58 8 Ujjain State On some high ground, about \(\frac{1}{4} \) a mile S.E. by S. of the village so called, 3 miles N.W. by W. of the town of Ujjain. The cart road from Ujjain to Unel passes within a mile N.E. of the station: Western Malwa Agency. 1849. Khándesh Vide pago 7—a 21 35 33 54 Con a hill, about 1\(\frac{1}{4} \) miles W. of the large village so called on the left bank of the Bori river, and 6\(\frac{1}{4} \) miles W.N.W. of the town of Yarola on the high road from Dhulia to Erandol; taluka Amalner. 1846. Nizam's Territory Mandsaur Sitate This station was originally fixed by the secondary triangulation of the Bhopal (Bhopai) and Malwa Topographical Survey, and is about 2 miles N.W. of the ligh road from Rutham to Indore: Bheel Agency. When visited in 1883, the station was found to consist of a platform of mud and stones, 2 feet in height, laving a mark-stone in the upper surface.	Of a conspicuous, conical hill about \(\frac{1}{4} \) a mile E. of the high road from Malegaon to Dhulia, and 3\(\frac{1}{4} \) miles S. of Laling on the above named road: taluke Dhulia. 1846. Amjhern State Small tree in the centre of the conspicuous and isolated hull, about a mile N.W. of Asakheri village, the same distance N. of Silote, 2\(\frac{1}{4} \) miles S. by E. of Sagar town, and 4 miles S.W. of Akolk a close to the high road from Mhow to Rutham (Rathim): Bheel Agency. 1847. Nizam's Territory Nizam's Territory Large dome of Begam bibi-ka makbara on the right bank of the Dudhna river, and close N.W. of the town of Aurangabad. 1845. Centre of building in the hill fort. 1846 20 33 58 8 75 37 23 6 Ujfain State On some high ground, about \(\frac{1}{4} \) a mile S.E. by S. of the village so called, 3 miles N.W. by W. of the town of Ujjain. The cartroad from Ujjain to Unel passes within a mile N.E. of the station: Western Malwa Agency. Rhándesh Vide page 7—a 21 35 33 54 74 57 21 60 On a hill, about 1\(\frac{1}{4} \) miles W. of the large village so called on the left bank of the Bori river, and 6\(\frac{1}{4} \) miles W.N.W. of the town of Dhulia to Erandel: taluka Amalaer. 1846 20 33 4 6 75 39 42 0 Nizam's Southorn tower of the fort. 1846 20 33 4 6 75 39 42 0 This station was originally fixed by the secondary triangulation of the Bhopal (Bhopal) and Malva Topographical Survey, and is about 2 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W. of the village of Bloda, and 22 miles N.W.	Of a conspicuous, conical hill about \(\frac{1}{2} \) a mile E. of the high read from Malagaon to Dhulia, and 31 miles S. of Laling on the above named read; taluka Dhulia. 1846. Amjhera State Small true in the centre of the complements and isolated hall, about a mile N.W. of Asakhier village, the same state with the state of the complements and isolated hall, about a mile N.W. of Asakhier village, the same state with the state of the large village, the same state with the state of the large village, the same state with the state of the large village, the same state of the Dudhna river, and close N.W. of the town of Aurangaland. 1845. Nizam's Territory Centre of building in the hill fort. 1846 20 33 58 8 75 37 23 6 Ujjain State On some high ground, about \(\frac{1}{2} \) and \(\frac{1}{2} \) by S. of the town of Ujjain. The cartron of from Ujbin to Unel passes with in a mile N.E. of the station: Western Malawa Agency. 1848. Khándesh Vide page 7—g, 21 35 33 54 74 57 21 60 2658 100 100 100 100 100 100 100 100 100 10

^{*} This station appertains to the Karáchi Longitudinal Sories.

Name of Station or Point	District	Description	Latitudo North	Longituda East of Greenwich	Height of Structure	No. of Triangle
Búmbrud Hill Pagoda Bambrool H. Pag.	Khándesh	On the sauthern point of a small, isolated hill about \(\frac{1}{2}\) a mile N.E. of the village of this name, and 4\) miles E.N.E. of M\(\text{sheij}\) Hailway Station of the C.I.P. Line: t\(\text{taluka}\) P\(\text{chara}\).	1	75 32 O·8	feet [1016]	155 156
Bámbrud h.s	,	On a hill, about 2½ miles W.S.W. of the village sa called, and close S.E. of Taikrádi on the road from Chálisgaon Railway Stalion to Bhadgaon tawn; sub-divisian Chálisgaan. 1846.	1	75 8 27 89		177
Bargar h.s Wurgark h. tree and stn.	Jaora State	On same high ground, about a mila S.E. by E. of tha village of Bagakheri, and 14 miles N.N.W. of Bargar village on the road from Piplanda to Jaora, and 44 miles W.S.W. of the latter: Western Malwa Agency, 1848.		75 5 57 53		68,69
Barkhera Hill Bush Gooraria II. Bush	n	At the N.W. corner of a small flat-topped hill, about a of a mile E. of the village of Barkhern, a of a mile S.W. of Dangloda village, and 14 miles W. of Gegarpura village: Western Malwa Agency. 1847-48.	[-	75 0 7		49
Báwangaz, XVIII .	. BarwániState	Tide pago 7—a	21 59 23 20	74 53 41 99	2112	22
Bercha Hill Tree Alahiswara II. Tree	Dhár Stato	On the castern end of a high, isolated hill, about ? of a mile S.W. by S. of the village of Berche, I mile N. of Dikwa, and be unites N.W. by N. of Runija Station on the Sindhia-Neemuel Section of the B.B. and C.I. Railway: Blool Agency. 1848.		75 16 7		85,86
Bhálgaon Hill Pagoda .	Ahmedangar	On the castern extremity of a ridge running E. from a flat-topped hill, about 3 of a mile S. by W. of the rillage so called, and 21 miles, N.N.E. of the large village of Sirur on the S. bank of the Siaphana river: taluka Jamkhed. 1845.	1 (2)	75_29 32 0	[1950]	315 316
Bhátkheri Hill Pagoda	Jaora Stato	At the N. end of a small, isolated hill on the Mandsaur and Jacra state boundary—about 14 miles, N.N.E. of Bhatteri village, and 5 miles N.W. by W. of the town of Jacra on the main rand from Mhor to Neemuch (Nimach): Western Malwa Agency. 1848.		75 6 0 7	[1804]	65
Bhátkheri Hill Treo		At the S. end of a small, isolated hill on the N. end of which stands a pagods: Western Malwa Agency, 1818.	23 40 24	75 5 50	•••	66, 67
Bhir Kingaon Pagoda	Nizam's Territory	South of the town of that name at the junction of the roads from Aurangabad, Chendravada, Fipri and Paithan, and about 12 miles S. of Aurangabad, 1845.	1942 8.3	75 20 41 9		278
Bhokardhan Tower	n	Highest and conspicuous tower in the town of that name. 1840.	20 15 30 2	75,48.40-8	P	207
Bijagarh Hill Fort	Indare State	Northern lower of the ruined fort of that name at N.E. corner of a flat-topped high hill, about a mile S. of the old ruined fort of Jakikbad on the road to Bladwall; pargana Jakikbad; Indore Political Agency. 1517.	21,41, 0.0	75 23 58 1		138

^{*} Seu description of this etation.

				T: 4 3 -	Height	
Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	of Station Height of Structure	2.02
Bondagaon Hill Tree Maismal	Nizam's Territory	Conspicuous tree on a hill clase to the village so called, about 2 miles N.E. of Pipalgaon, and 7 miles W.S.W. of Pulmari town on the read from Aurangabad to Ajanta. 1846.	20 3 46	75 22 16	feet 	223
Bori Hill Peak Gowal Pk.	Barwáni State	About 2 miles S. by E. of the village of that name on the read from Rajpur to Pansemal, and 3½ miles W. by S. of Naktimata village: pargana Pati. Deputy Bheel Agency. 1847.	21 47 34	74 52 45	[2331]	136
Bori h.s. '	Nizam's Territory	On an isolated hill, about 1½ miles S.S.W. of the village so called on the read from Ranjani to Ambad town, the same distance E. of the latter, and 2 miles N.N.W. of Balagaon. 1845.	19 36 42.09	75 52 3 2 · 95		283
Bori Hill Tree	,,	Conspicuous tree close to the preceding station of the same name, 1845-46.	193642	75 52 33	•••	
Búda, XXI*	Rámpura State		24 14 11 · 86	75 10 43 06	1526	1
Budapura h.s Gopalpoor H.S. Tree	Rutlam Stato	On the highest point of a group of hills, about \(\frac{1}{2} \) a mile S. of the small village of that name, \(3\) miles S.W. of Gopálpura, 2 miles N.W. of Pelsoria on the read from Shiagarh to Rutlam, and \(3\) miles E. of Shingarh: Western Malwa Agency. 1848.	23 21 19.54	74 57 9'14		82
Chakeri B Chickara Stn.	Barwáni Stato	On low ground, about 12 miles E. by N. of Anjar town, the same distance W. by N. of Chápri village, and immediately N. of the cart read from Anjar to Mandwara on the Nabal stream: Deputy Bheel Agency. 1827.	22 241.89	75 7 38 65	•••	181
Chándgaon Tower	Ahmednagar	About \(\frac{1}{3} \) a mile N.N.W. of the village of that name, \(4\frac{1}{3} \) miles E. by E. of R\(\text{Anigaon} \), 2 miles E. of the read from Paithan to M\(\text{anu} \), and 10 miles S. of the former: sub-division Shevgaon. 1845.	19 19 10.9	75 26 31 .5	•••	835
Chaoradongar h.s	Nizam's Territory	On a square, flat-topped hill rising about 75 feet above the surrounding plateau, about 8 miles N.W. of Jálna, 1½ miles N. of Pangri village, 3 miles W. by N. of Mandwa village, and 4½ miles N.N.W. of Nagavádi on the read from Jálna to Aurangabad. The station is denoted by a mark-stone embedded flush with the ground. 1883-84.	19 56 15 · 87	75 50 37 09	2138	251 252
Chincholi, XXIII† ,	,,	Vide pago 10_g	18 55 25 27	75 18 41 . 47	2928	47,48
Chincholi Hill Dipmal	Abmednagar	Largo dipmal about 1 of a mile W. by S. of the following station of the same name: taluka Nevasa. 1845.	19 30 12 1	75 530.5		322
Chincholi h.s	31	On a low hill, about 1 a mile S. of the road from Pichadgaon to Gevrai, 21 miles W. by S. of the latter, 11 miles S. by W. of Dighi, and 21 miles S.E. of Babulkheda: taluka Nevasa. 1845.	19 30 12 65	75 5 43 33		316 317

^{*} This station appertains to the Karáchi Longitudinal Series.

[†] This station apportains to the Bombay Longitudinal Series.

Nama of Station or Point		District	Description	Latitude North	Longitude East of Greenwich	Height of The Structure	No. c1 riangle
Chinnapur Hill Pagoda	•••	Nizam's Territory	About 11 miles W. by S. of the village of that name, 31 miles S.S.W. of Antur fort, and 4 miles E. of Soigaon on the read from Aurongabad to Bhúl. 1846.	} - • •	75 ¹ 5 49	feet	. 1. 1
Damangaon Hill Pagoda Sawang H. Pag.		11	On a detached hill, about 11 miles E. of the village of that name, 21 miles W. of Saranghi village, and 4 miles N.N.E. of Takli large village. 1846.	20 8 3 2	75 18 55 9		219
Damangaon s	•••	ħ	On a tower close to the village so called, about 8 miles W.S.W. of Dongaen town, and 4 miles W. of Pangri village on the read from Lonegoon to Jálno. 1845.	19 59 49 09	75 51 42:24		250
Daulatabad Fort Flag-staff		11	On the central and highest tower of the hill fort. 1845.	19 56 28 9	75 15 15 3		269 270
Daulatabad Minarot		n	In the town of Daulotabad. 1845	19 56 37 4	75,15 33 0	•	271
Dohor Hill Templo	•••	Kliåndesli	Mahader pagoda on the hill fort, about 1½ miles S. of the old revenue town of Deher, 5 miles in the same direction of Pimparkhed Railway Station of the G.I.P. Liac. 1640.	, , ,	74 56 50 0		218
Deo Dongri, V		Gwalior State	Tide page 4_g	23 26 47 79	75 34 44 17	1727	0, 8
Doogurária h.s	•••	Indoro State	On a detached, conical hill, about \(\frac{1}{2}\) a mile S.W. of the village of the same name, \(\frac{1}{2}\) miles S.E. of the Inderecity. A transway line from the Holkur State Railway leads to the hill which is a colomated place of pilgrimage: Indere Political Agency. 1847.		75 58 23 52		10: 10:
Devalgaon Treo	•••	Ahmednagar	Conspicuous tree on the table-land near the village of that name, about 2 miles 8. by W. of Karanji village on the read from Amrapur to Abmedingar. 1845-46.		75 1 46	· · · · · · · · · · · · · · · · · · ·	11
Dowás Hill Temple		Dewás Stato	Os an isolated, conical hill immediately N. of the high road from Bombay to Agra, the town of Dowás being on the opposite side of the road: Indere Political Agency. 1647.	22 58 12 5	76 6 2.9	[2167]	10
Dhabadi Hill Tree Dobari Trees	·	Nizam's Territory	Near the town of that name on the read from Auranga- bad. 1846.	20 3 23	75 47 6		•
Dhaigaon, XXXIV	*8**	Ahmedoogor	Fide page 10_g,	19 30 35 04	75 15 10 99	1553	.44
Dhajara Hill Peak Jamb Ghaut Pk.		Koselgarh Sinte	The highest peak on the Vindhyo range, nhont 3 miles S.S.W. of Kueslgarb, 21 miles W. of Beks village, 2 miles N. by E. of Bern Jám village, and 41 miles S.W. of the Rajputana-Malwa Railway Line: Indeze Political Agency. 1817.	22 25 52	75 51 20	[2747]	11
Dhalmu h.s		Ujjsin State	On a flat-topped hill on a plateau, about a mile E.E. of the village of that name, 2 of a mile W. by S. of Kherla village, and 13 miles S.S.E. of the village of this on the cart rend from Unel to Ujjain: Western Malwa Agency. 1848.	23 15 39 26	75 42 24:17	[1773]	87

^{*} See description of this station.

Name of Station or Point	District	· Description	Latitude North	Longitude East of Greenwich	Height of Station Height of Structure	210.01
Dhamnár, II	Mandsaur Stato	Tide pago 4_0	23 53 22 29	0 / " 75 11 35 91	fcet 1678 1	1
Dhanora, VII	Sailána State	Fide pago 5 <u></u>	23 16 30 23	75 17 42 57	18.0	9
Dhánura Pagoda Dhorkhara pag.	Nizam's Territory	Near the village of that name on the left bank of n tributary of the Ganda river and on the read from Gandapur town, about 4 miles E. by S. of Dhaigaon on the read from Aurangabad to Ahmednagar. 1845.	19 42 56*0	75 14 46 6	,	276
Dhanyar, XXIV	Khándesh	Fide pago 8	20 53 3.31	75 38 29 61	2.0	31, 32
Dharakpur Hill Tree	Agar Stato	On an isolated hill on which stands the village of Dharakpur, about 1½ miles S.E. of Bápsia on the road from Barandia to Gangrár, and 2 of a mile S W. by S, of Ratanpur; Western Malwa Agency. 1848.	23 50 19	75 4 ⁸ 33	[1650]	59
Dhár Hill Pagoda No. 1	Dhár Stato	White temple with a lefty spire known as Kálka Máta on the small hill close W. of n large tank, about a mile W. of the town of Dhár, and close N. of the high read from Dhár to Amjhera: Bheel Agency. 1847.	22 35 51.0	75 19 27 1	[1938]	118
Dhár Hill Pagoda No. 2	n	On an isolated, conical hill, about 14 miles S.E. of the town of Dhar, 1 mile S. of the high road to Bombay, and 2 miles N. of Parlia village on the road from Dhar to Dilaura: Bheel Ageucy. 1847.	•	75 21 30	[1967]	•••
Dhár h.s Amulnair Stn.	Khándesh	On a detached hill about a mile S.S.W. of the village of this name, \frac{1}{2} a mile S.S.E. of another detached hill crowned with two temples, and 3\frac{2}{2} miles N.W. by N. of the town of Amalner on the left bank of the Bori river, a tributary of the Tapti (Tapi): taluka Amalner. 1846.		75 4 29.12	[739]	164 165
Dhutni Peak	Dhar Stato	Of a conical, rocky hill on the Vindhya range, close to the little village so called, about 5 miles W. of Nalchlin town, and 11 miles in the same direction of Amkho village: táluka Nálchha. Bheel Agency. 1847.		75 21 44	[2403]	123
Digau h.s	Mandsaur Stato	This station was originally fixed by the secondary triangulation of the Bhopal and Malwa Topographical Survey, and is on some high ground, about \(\frac{1}{2} \) n mile W. of Chhota Digau, close to the cart read to Somli, 1\(\frac{1}{2} \) miles S. by E. of Mália village, and 2 miles N.E. of Bara Digau close to the cart read to Mandsun: Western Malwa Agency. The station was found to consist of a pillar of stones and mud cement, 18 inches high, and 3\(\frac{1}{2} \) feet in diameter, with a circular stone platform of the same height and 11 feet in diameter. 1882-83.	24 3 42 70	75 12 59 22	1548 1°5	50, 51
Dohori h.s	Khándcsh	About the centre of a detached hill, about 12 miles 8. by W. of the village of this name, the same distance N.N.E. of Hivarkheda, and 4 miles N.W. by N. of the town of Jámner: táluka Jámner. 1846.	20 51 3 0°54	75 47 8 10	[1085]	151

				' ' '	<u> </u>	
Name of Station or Point	District	Description	Lotitude North	Longitude East of Groenwich	Height of Tri	
Dongaon Hill Dipmal Dondgaon dip.	Nizam's Territory	Near the town of that name, about 7 miles W. of Deulgaon Rája, 3 miles S.W. of Pokri villege on the réad from Jafferabod to Jólns. 1845.		75 58 52-2	feet	213
Dongargaon Hill Pagoda No. 1	11	Conspicuous temple on the southern end of a range of hills near Dongargaon village, about 2 miles E. of Sabalgaon, and 5 miles N.W. of Pulmari on the road from Aurangabad to Ajanta. 1846.		75 24 41 7		220
Dongargaon Hill Pagoda No. 2 Patri H.Pag.	11	Domo of the pageda near the villege of that name, about 4 miles E.N.E. of Pulmori on the read from Anrangabad to Ajanta, and 3 miles E.S.W. of Petri village on the same rood. 1846.		75 30 52 6		221;
Dudhâla, IV	Jhallawor State	Fide pago 4—a	23 50 54 31	75 49 25 06	1675 5.	
Dulot Temple	Indore State	Close to the village of that name on the right bank of the Sipra river, about \(\frac{1}{2}\) a mile W. of the cantonment boundary of Mehidpur: Indoor Political Agency, 1848.		75 40 5.6	7	78, 70
Dundgaon Mosque	Nizom's Territory	Close S. of the villege so coiled on the rend from Ambad to Paithan, end about 5 miles S.W. of the former. 1845.	19 30 53.3	75 42 4 0		300
Gandali Hill Pagoda No. 1		On a detached hill close to the reed from Aurongabad to Pátoda, close E. of the village so celled, and about 5 miles S.E. of Aurangabed. 1845.	19 49 29 7	75 26 11 4		273
Gandali Hill Pagoda No. 2	19	On a conical hill close S.W. of the village so called, about 4 miles E.S.E. of Satara town, 2 miles S. of the road from Aurangabad to Pátoda, and 5 miles S.S.E. of Aurangabad. 1845.	1 . 1	75.25 19		•••
Ganori Peak	‡» .	Of a conical hill near the village of that name, about 6 miles S.W. of Palmsri town on the road from Aurangabad to Ajonta. 1846.	20 3 11	75 23 18	•••	224
Gedaida Dipmal Birkingaan Dip.	18	Close to the village of that name, about 2 miles S.W. of Ithir Kingaon town, the same distance N.N.W. of Suppura village on the rood from Bhir Kingoon to Tandeli, 1815.	19 41 14 7	75 19 39°0	· · · · · · · · · · · · · · · · · · ·	279
Gerrái Hill Pagoda Geterai H.Pag.	J.	Large spire of the pageds about 33 miles S.W. of Gerrái town, 23 miles W. by N. of Doke Vádagson on the resultrom Gorrái. 1845.	191341.9	75 45 3 2		309
	`				1	

Name of Station or Point	District	Description	Latitudo North	Longitude East of Greenwich	Height of Station Height of Structure	1 1
Ghiregaon Tower Girgaon	Alimednagar	In the centre of the small village of that name, about 24 miles E. of the large village of Salibatpur, 21 miles N. of Gevrái, and 14 miles W. by S. of Sirasgaon: táluka Nevása. 1815.	0 , " 19 32 48 4	75 7 40°4	feet 	323
Godagaon Hill Peak Gorchgaon Pk.	Nizam's Territory	Of n conical hill, about 14 miles E. of the village of that name, 6 miles N.E. of Daulatabad, and the same distance E. of Röza town on the road to Daulatabad. 1415-46.	20 0 12	75 19 9	•••	227
Golagaon Domo	111	Close to the village so called, about 4 miles E. by N. of Röza town, G unles N. by E. of Daulatabad, and 1 mile N. of Godagaon. 1815.	20 115.5	75 18 45.0	•••	•••
Golagaon h.s Golehyaon Pk. Stn.	11	On the centre of a conical hill, about 14 miles E. of the village of that name, 7 miles N.N.E. of Daulatabad, and the same distance E. of Ellora. 1816.	20 1 20 51	75 19 53 66		225
Gula Pagoda Golar pag.	19	Near the village of that name, about a mile S. by W. of Pangri, 9 miles in the same direction of Jalua, and 1 mile E.S.E. of Nagjari village on the road from Jalua to Ambad. 1845.	194329.3	75 52 46-3	•••	295
Gosainbaira h.s	Dliár State	This station was originally fixed by the secondary triangulation of the Khandesh Topographical Survey, and is on a low hill of that name lying 2 miles 8, of Kharakwani village, and 1 mile W. of the read from Southeal to Dolani: Bheel Agency. The station was found to consist of a mark-stone buried flush with the ground and protected by a large heap of stones, 1882-83.		75 30 26 47	972	130
Gualed Hill Tree	Jhallawar State	On a small hill about \(\) of n mile N. by W. of the village so called, and t mile N.E. of Rojána on the eart road from Dag to Gangrár: Harowtee (Haráoti) Agency, 1817-19.	Į.	75 44 38	[1628]	55, 56
Guddana Hill Pagoda Maismal H. Pag.	Niram's Territory	About n mile N.E. of the village so called, 2 miles S. by E of Takli large place, and 41 miles N.E. of Röza town. 1815.	20 322.6	75 17 26-5		226
Gumánpur, XVI	Amjhera State	Γide ηνατο 7	22 34 50 27	74 54 59 56	1825 5°3	21
Gurárin Hill Peak Bariah Pk.	Indore State	The highest and conspicuous summit of a hill, about a mile W.N.W. of the village of that name, 3 miles W. of Baroda village, and 2 miles S. of Asrawad village on the read from Indore to Rågliogarh: Indore Political Agency. 1847.	22 40 23	76 045	[2295]	106
Gurla, VIII	Gwalior State	Tide page 5	23 17 36 14	75 35 36 - 57	1716	10
Harnása, XII	Depálpur Stato	Fide page 6	22 47 29 91	75 35 37 33	1818	15
Hatgaon Tower Hadgaon S.W. Ft.	Ahmednagar	S.W. tower in the village so called on the road from Mungi, about 31 miles S. by E. from the latter, and 2 miles E.S.E. from Pingvádi village; táluka Nevása, 1815.	19 21 38.3	75 30 11.2	•••	331

						1	ارد -
Nama of Statico er Poiot		District		tudo	Longitude East of	Height of Station	No. of
riama of practice of 2000		21011100	No	rth -	Greenwich	Height of Structure	Triangle
	1		0.1	<i>"</i> -	0 / //	feet	17.5
Hukarda Pagoda	[Nizam's	Immediately obove the S. bonk of a streem, about 4 of a 19 7	53.3	1.		319
}	- 1	Territory	mile W. of the village so called, 21 miles N. by W. of Bhalgaon, and the some distance S.S.E. of Mirsangri.		07.5	٠,	
	- 1		1845.	t 1,		'-	
	- 1					4.5	
Indoro Pagoda		Indoro	Mahader pageda close W. of the pelace in the city: 22 43	3.0	75 53 46 2	[1791]	107
		Stoto	Indore Politicel Agency. 1847.	"'、			100
	- 1			٠.		3.14	
Indore Palaco			In the town. 1847 22 43	6	75 52 40	* *.	Tools,
and a mino	}	. 11	11 the country 101 to 107 to 1	· .	77 23 45%	177	
j.				'	·		1. 3
Indráwan, XIII		Dhár Stato	Fide pago 6-0 22 48	18.54	75 13 23 78	.1834	16,17
	- 1		G.	,		7.5	1.5%
	- }				, (
Jadgaon h.s		Nizam's	On a hill, about o mile N. of the village so called, the 1950 same distance E. of Tongaon, and 11 miles S.S.E. of	4.72	75 33 30 94		258 259
Jurgaon Stn.	1	Territory	Ladgaou on the read from Auraogabad to Jalac. 1845.	` . '	, , , , , ,		200
	1						13.3
Jaipur Hill Treo		3>	About } n mile 8. of the villege of this name, 2} miles 19 53	20	75 34 18	•••	260
Jowpoor Tree		"	About 1 a mile S. of the villege of this name, 21 miles N.W. of Satena village on the road from Aurangahad to Jáine, and the same distance S. by W. of Bangaou on the road from Aurangabad to Ladsangri. 1845.	· .			
	- 1		on the road from Aurangabad to Ladsingvi. 1845.	,		1.40	1,,
	1			`,.		gerati, in	
Jalálabad, XIX	(Khergen	Vide page 7_G 21 40 :	35.20	75 26 34 90	2613	21
		Stato				5.2	100
						.(1)	
Jalálkhori, X		Ujjain	Tide page 5_G 23 10	4.80	75 44 35 01	1749	14
,,,,	***	Stato	G		73 44 33 31	3.8	∫ ()
	- [, i ,			15
Yallon Thank	İ		Towards the N.W. end of a small detached hill, about 11 20 52 2	R	75 34 6	$\Delta (\chi)$	150
Jalka Peak Itnar Pk.	•••	Kháodesh	miles N, by W. of the village so called on the metall	" .:∤	/3 3# 0	******	1.1.
			of Shireoli Station on the G.I.P. Railway: sub-division	:			
1		· '	Nasirabad. 1846.				
Jalki Hill Pagoda	` {	Nizam's Territory	Spire. About 11 miles S.S.W. of the village se called, 20 24 5 the same distance N.N.E. of Tulni village, nod 21	2.3.	75 34 20 8		195
Dhamni H. Pag.	ĺ	Actinoty.	miles N.N.W. of Kharsod. 1845-46.	. [130
,							
Jalki Hill Peak	***	,,	About 3 miles W. N. W. of the village so called, 2 miles W. 2027	8.	75 32 14	1	
	*,	' - '	by N. of Jambai village, 21 miles N.N.E. of Sindphal, and 111 miles W. by N. of Uodangaen. 1846.	- F			133
				· '			
Jálna Hill Pagoda			White pageda E, of the town on the road to Sindkhed, 19 51 3	9.2	75 58 47 9		289
	,***		and near the village of Linthi on the same read.	. 1			290
							.á · ·
Jaina Pagoda	,		Large white Ganpati pageda E. of the town and W. 1951.1.	1.8	75 56 54 0		287
	:		of the Infactry and Caralry Lines. 1845.			1	288

Name of Station or Point	District	Description .	Latitudo North	Longituds East of Grosnwich	Height of Station Height of Structure	110.01
Jalodia h.s	Dhár State	This station was originally fixed by the secondary triangulation of the Bhopal and Malwa Topographical Survey, and is on a slight rise near the western edge of a plateau, about 2½ miles W. by N. of the village of Jalodia, 3½ miles N.W. hy N. of Kod town, and the same distance W.S.W. of Piplia. It is close to the read from Kod town to Delchi: Bheel Agency. When visited in 1883, the station was found to consist of a mud and stone platform I foot in height, having a mark-stone in its upper surface flush with the ground, the platform was raised to 8.8 fest above the ground lavel. 1882-83.	0 22 55 29·04	0 1 11 75 11 24*83	feet 1825 8·8	98, 99
Jambai Peak	. Nizam's Territory	About 4 miles W.N.W. of the village so called, and 3 miles N. by W. of Sindphal. 1846.	2028 5	75 30 45	, , ,	
Jamdi h.s	,, ,,	On a peaked hill, about 2 miles S. of the village of that name, the same distance N.W. of Sirjapur, and 6 miles W. by S. of Kanad town on the read from Aurangabad. 1846.	20 14 48 35	75 5 23 73	•••	212
Jámkhed, XXXI	,,	Fide page 10_g	19 40 33 04	75 41 55 24	2174 3.0	39, 41
Jámner Hill Peak	Khándesh	The lowest and westernmost of the three small isolated hills about \(\frac{1}{2} \) a mile apart and lying in a line from E. to W. About \(\frac{2}{2} \) of a mile S. of the town of Jamner, the road from Jamner to the village of Kodli passes by the western foot of the hill: taluka Jamner. 1846.	I	75 49 41	[984]	153
Jámnia Hill Peak **Mandogarh Pk.**	Dhár State	Of a conical hill at the S. edge of a plateau, about 2 miles E.S.E. of Mandogarh hill fort: Bheel Agency. 1847.	22 19 6	75 28 11	[2270]	128 129
Jánapáv Hill Pagoda . Hasarpoor H. Pag.	Hásilpur Stato	A pagoda so called, surrounded by trees, on the highest point of a range of hills running N. and S., about 2½ miles E. of Jesarnagar on the high road from Bombay to Agra, and 4 miles S.E. of Hasilpur town: Holkar Territory. 1847.	22 27 33 2	75 43 45 0	[2803]	116
Jaola Hill Peak	Nizam's Territory	About 41 miles S. of the village so called 11 miles S.W. of the Megaon Chauki on the read from Dhaera to Sávda town, and 3 miles N.N.W. of the former, 1846.	20 32 31	75 55 20		190
Jaora Palace	Jaora State	In the centre of the town on the Rajputana-Malwa State Railway: Western Malwa Agency. 1848.	23,38 16	75 10 4		
Jarandi Hill Pagoda .	Nizam's Territory	On a hill close to the small village of that name, about 5 miles W. by N. of the town of Baitalvádi. 1846.	2034 7.1	75 35 36.8		187 188
Jatoda h.s	,,	On a hill, about 3½ miles E.N.E. of the village so called, 7 miles N.E. of Daulatabad, and 4 miles N.W. of Mangsangvi village on the road from Aurangabad to Fulmari town. 1845.	19 59 54*21	75 21 18 28	•••	228

Name of Station or Point		District	Description	Latitude North	Longitude East of Greenwich	Height of Structure	10.61
Satoda Hill Troc	•••	Nizam's Territory	Largo tree about 200 yards 8.W. of the secondary sta- tion of the same name. 1845-46.	19 59 52	0 , ,, 75 21 14	feet	2:9 230
Thar Hill Treo Jarandla H. tree	•••	Rutlam State	Largo tree at the N. end of a plateau, about 14 miles N.W. by N. of the village of Jhar, 1 mile S. of Nunera, and the same distance N.E. of Sarwaria: Western Malwa Agency. 1848.	, , ,	75 15 25	[1879]	89,8
Joharapur Tower	****	Ahmednagar	Large tower in the village so called, about 3½ miles W.N.W. of Shergaon town on the road from Paitlan, and 2 miles N.N.E. of Samangaon on the same road; táluka Novása. 1845.		75 13 14 1		828
Iunvána Hill Peak <i>Mandrai Pb</i> .	•••	Khándesh	Conspicuous hill peak locally known as Mandrai, about 3 miles N.W. by W. of Junyana village close W. of the nnd 41 miles S.E. Dhu		74 50 g	[1875]	169 170
Kachner Hill Tree	•••	Mandsaur Stato	Largo free on some high ground, about 1 of a mile W. of the Holkat-Normuch State Railway, 1 mile N.W. of the village of Exchaer, 11 miles S.E. by E. of Sirsoda village on the road from Nagari to Nimod, and the same distance N. by E. of Lasuria: Western Malwa Agency. 1847-48.	1	75 8 28	[1667]	63
Kadgaon Hill Pagoda	•••	Nizam's Territory	Pagoda sarroanded with trees on a hill near the village of that name, about 2 miles W. of Nethana village, 1½ miles S.E. of Pangri, and the same distance N.W. of Nagavádi village on the read from Jálan to Auran- gabad. 1845-46.	• •	75 51 53 6		25
Káládeo Palaco	***	Vjjain Stato	On an island in the Sipra river, about In mile N.W. of Káládee, 3 míles N. of the town of Ujjain: Western Mulwa Agency. 1848.	23 14 44	75 49 0		18.0
Kúlágaon Pagoda	•••	Nizam's Territory	Near the village so called on the left bank of the Dudhna river, about a mile N. of Daitanna village, and 3 miles W. of Hisvau village on the road from Jalua to Gunsangri. 1845.	19 42 10.7	75 57 29 6		28
Kannd h.s Palashkheir	'. <u></u>		About 2 miles S.W. of the town of the same name, and the same distance N.E. of Fallaskhed village. "1846.	20 14 24 52	75 9 55 20		21
Kankroj h.s.		Khándesh	On a tomb on a small detached hill having the village so coiled at its N. foot, about 24 miles E. N.E. of the large village of Baludauppur on the left bank of the Bori river, and 4 miles N.W. by N. of the town of Parola on the high road from Dhulia to Ernadol: taluka Amalaer. 1846.	20 55 35 08	75 6 57 94	[861]	16 16
Kankura Hill Tree	· · · · ·	Nizam's Territory	About a mile S.E. of the village so called on the read from Aurangabed, 3 miles N.E. of Palsi on the same road, and S.F. miles in the same direction of Aurangabed. 1845.	195810	75 29 3	 }	21

Name of Station or Poiat	District	Description	Latitudo North	Longitude East of Greenwich	Height of Station Height of Structure	No. of Triangle
		1	0 1 11	0 1 11	feet	
Kanthária Hill Tree Allote H. tree	Dowás State	Close to the village of that name on some high ground, about a mile E. by S. af Richia, the same distance S. by W. af Dislipura, and 5½ miles W.N.W. of Ghát Piplia on the right bank of the Sipra river: Indore Political Agency. 1848.	23 40 45	75 34 53	[1598]	62
Kapátal h.s	Amjlicra State	This station was originally fixed by the secondary triangulation of Bhopal and Malwa Topographical Sarvey, and is on a little isolated hill about 60 fect above the ground to the W., \(\frac{2}{3}\) of a mile S.W. of the village of that name, 2 miles S.S.E. of Lergaon, and the same distance S.W. of Baloda on the road from Dasai town to Amjhera: Bheel Agency. The station was found to consist of a mark-stone buried nearly flush with the ground, but in 1882-83 four other stones were buried around it with marks engraved thereon, the intersection of lines joining them coincided with the station mark which is covered over with a cairn of stones. 1882-83.	22 39 8:50	75 7 44 ⁻ 05	1880	
Karai h.s. <i>Kurrai Hill Stn</i> .	Indoro State	Oa n small isolated hill, about ? of a mile S. by W. of the village of Knrai, near the Indore and Gwalior state boundary, and 3 miles S. of the town of Mehidpur: pargana Mehidpur. Indore Political Agency. 1848.	23 26 38 93	75 40 41 54	[1661]	74
Karai Pagoda		Between the village of that name and the tank to the W. of it, about 2 miles S. of Mehidpar town, and 1 mile W.N.W. of Likakheri village on the read from Ujjain to Mehidpur: pargnaa Mehidpur. Indere Political Agency. 1848.		75 41 11.2	•••	80
Káregaon Tower Kaligaon	Alimediniga	A few yards N.W. of the village of that name, about \$\frac{1}{2}\$ of a nile W. of the right bank of the Godávari river, 3 miles E.N.E. of Khamgaon, and 4\$\frac{1}{4}\$ miles N. by E. of Dahigaon: táluka Novása. 1845.	19 33'42'0	75 14 25 4		825
Karsod, IX	Ujjain State	Fide page 5—g	23 646-48	75 28 12.70	1781 5	11
Karsod Hill Pagodą	17	About 1½ miles W.S.W. of the village of that name, 1 mile N.N.W. of a police chauki on the road from Barnagar town to Karsod, and 5 miles N.E. of the town and Railway Station of Barnagar: Western Malwa Agency. 1849.	23 6 47.6	75 28 11.7	•••	•••
Kasaner h.s	Nizam's Territory	On a conical hill, about 3 miles S.S.E. of the large village so called on the road from Bhir Kingaon to Ambad, 1 mile E. of Darragaon, and 11 miles N.N.W. of Parundi village on the road from Chhota Haddul to Tupvádi. 1645.	19 39 58.05	75 31 16.05		256 257
Kaula-ka-Máta, XI	Sailána Stat	Vide page 6	23 748.21	75 12 33 30	1948	12, 13
Kekatnimbhora h.s. Tikutnimbor Stn.	Khándesh	On the northern one of a small group of hills, about a mile W. of the village so called on the metalled read from Jánner to Ner: táluka Jámner. 1846.	20 49 12 16	75 44 33 77	[1018]	152
Khúmkhed Hill Pagoda	· Nizam'e Territory	On the peak of a high hill, nbaut 1½ miles W. of the village so called on the left bank of the Knrpura river, the same distance S. of Chinchell village, and 3 miles W. of Pëdgaon on the road from Bid town. 1845.	19 5 8·8	75 44 42 0		342 343

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Trian	
			` '	Greenwich	Structure	
			0 1 .11	0 1 11	feet !	
Khandra Hill	Khándesh	Centre of a large hill in the Satpuda range, about in	21 21 44	75 11 7	14	0
Lasoor H.	1	mile N.E. of the smell villege of Klandra on the left book of the Ancrevice, and 52 miles N. of Ganpur also on the left book of the some river: talake Shirpur.				3
		also on the left bonk of the some river: taluke Shirpur. 1847.	, ,	5		7
			<i>'</i> ; · · · · ·			,
		1				
Kharvándi Hill Peak .	Ahmednagar	About the centre of	19 11 59	75 25 40	81	8
		About the centre of 23 miles N.N.E. o tonce E. of Nand of Nogolvádi; táluka Shorgaon. 1845.			1. 11:45	Ů,
		of nogottant: tainga Shorgaon. 1045.				·v
Kilanki Fort	Nizam's	Centre of the hill fort, about 11 miles S.W. of the village	20 14 43	75 0 21		. 3
Kalanki Fort	Territory	of that name, 11 miles W. of Kanad town, and 5 miles S.E. of Deher old revenue station. 1846.	r			3;
						,
77.31 1.4	4	77.	22 28 50.2	71 58 20 4	[1778]	ر در ا
Kodi h.s. ··· ·	Amjhera Stoto	On a pook of a high range of hills lying E. of the Uri	22 20 50 7	74 30 20 4	1.7703	
		the village of Kodi, the same distance S.W. of Dehel- ghate, and 4 miles E.S.E. of Tands town: Bheel				
		Agoney. 1847.				,,,,,,,
		, , , , , ,				t! 34.
Kologaon Hill Tree	Nizam's Territory	About 21 miles W. of the village zo called, the same distonce S.W. of Rowdgaon, and S. of Pipla village	19 953	75 38 15		II.
		on the road to Umred. 1845.				- 4. - 4.
						į,
Koralla Hill	}	The northern brow of a hill on the edge of the ghat,	20 30 16	75 30 26	1 1	91.
Aorana ann	" "	near the small village of that name, about 10 miles				
		near the small rillage of that name, about 10 miles W.S.W. of Baitalradi, and 12 miles W.N.W. of Undongoon. 1846.		, , ,		۱ ۱
	į.					
Kulah h.s	772.50.00.3		20.28.42.28	75 27 27 57		182
Shendoorni Stn.	Khándesh	On a hill dargah cleso to the village of that name on the rood from Shendurni town to Pachera Reliway Station, and about 5 miles W.S.W. of the former:		15 37 27 32		188
		Stotion, and about 5 miles W.S.W. of the former: taluko Jamper. 1846.	, , , ,			
					100	٠.
,				77.06.0010.0	1736 00). g
Kwála s	Uljoin Stote	This station was originally fixed by the eccondary tri- angulation of the Bhopol and Molwa Topographi- col Survey, and is on a small tank bank close E. of the small villege of Kwile on the road from	22 50, 1,00	/5 20 30 32	4.5	".
	.]	col Survey, and is on a small tank bank those E. of the small village of Kwale on the road from		, , ,		1.
	`	and and 31 miles N by W of Pinia : Western Malwa			4.7	}
1	. •	Agency. When re-fixed in 1883 the station was found to consist of a platform of mud and stones, 41 feet in				1
		height, having a mark-stone in its upper surface.				٠.,
		1882-83.				
Lálgarb Hill Pagoda	Azajhera	Large pageda at the north end of the old fort on a flot-	22 30 27 8	75. 5 45 1	[1790] 1	21
	State	topped range of hills; about 2 miles 8. of the edge of the Central India plateau, 14 miles S.P. of the village			1	22
		of Lalgari, the same distance E. of Bhatikhodra on the road from Garakul to Mendha, and 5 miles 8.W.	,		1	. 3
		of Amiliers town: Bheel Agency. 1647.				,
				1-1.5		;
		Contraction of the second	l an 10			
Laling Hill Temple	Kháodesh	White demed temple in the hill fort, about to mile 8.W. by 8. of the village so called on the high road	20 48 40 4	74 46 51 4		160
		from Malegaen to Dhulis, and 61 miles S.S.W. of the latter town: taluko Dhulia. 1840-47.	1 2			161
	1	the latter toute talted Manne . 2550-414	1			

Nama of Station or Point	District	Description -	Latitade North	Longitude East of Greenwich	Height of Station Height of Structure	No. of Triangle
Lasulia Hill Tree Loosaria H. Tree	Gwalior State	At N. edge of a plateau, about \$\frac{2}{3}\$ of a mila S.E. of the villagase called, \$1\frac{1}{2}\$ miles N.E. of Gurla on the road from Unel, and 2 miles S. by E. of the town of Unel: taluka Unel. 1848.		75 36 9	feet 	
Limbgaon Hill Masjid Nimbgaon dome	Nizum's Territory	Double demed masjid, about \(\frac{1}{2} \) a mile W. of the village so called on the left bank of the Nanni river, and 1\(\frac{1}{2} \) miles E. by N. of Roisingi village on the read to Yellim. 1845.		75 33 7.0	•••	***
Lohári, VI	Jaora Stato	Vide page 5	23 34 57 88	75 816.03	1736 13°4	7
Lupára h.s	Ujjain State	Towards the S. end of a flat-topped hill, about ½ a mile N.W. of the villaga so called, 22 miles E. of Jahángir, pur town, and 13 miles W. of the town of Ujjain: Western Malwa Agency. 1848.		75 36 7.75		88
Machla Hill Peak Row Pk.	Indore State	Of a small conical hill, about a mile W. of Machla villaga, 2 miles S.E. of the villaga of Rão on the high road from Mhow to Indore, and the same distance E. by S. of the Railway Station of that namo: Indore Political Agency. 1847-48.	22 37 12	75 52 53	[2279]	109 110
Machla Hill Temple	,	A small ruined temple on the centre of the large isolated hill, about 14 miles S. of Machla village, 3 miles N.W. by N. of Dateda village, and midway between the ligh roads from Indore to Mhow and from Indore to Khandwa: Indore Political Agency. 1847.	22 35 58 9	75 53 37 0	[2508]	111
Maholi Peak Chermal	Nizam's Territory	About a mila S.S.W. of the village of that name, 2 miles N.E. of Katagati villaga, 3 miles E. of Palsi on the road from Aurangabad, and the same distance N. of Barud village on the high road from Aurangabad to Akola. 1845-46.	1	75 30 6	••• •	237
Málágaon No. 1 h.s.	,,	On a ruined hill pagoda, about \(\frac{1}{2}\) a mila S. of the village of that name, 3 miles S. of Dongaen town, and the same distance W. by N. of Wagral on the road from Jálna to Doulgaon Rája. 1845-46.	1959 8.00	75 58 6·79	•••	244 245
Málágaon No. 2 h.s.	,,	On a hill, about in mile S.E. of the village of that name, 3 miles S. of Deagaon town, and the same distance W. by N. of Wagrul on the read from Jalan to Deulgaon Réja. 1845.	19 59 11 99	75 58 31 • 94	•••	246
Manvel s	Khándesh	On the top of a large building in the village so called close S. of the Bonak stream, about 14 miles S.W. of the large village of Sakli, and 34 miles E.S.E. of that of Dambhorni: taluka Savda. 1846.	21 912.67	75 38 57.24	•••	148
Mathuri, XXXIII	Nizam's Torritory	Fide page 10	19 10 34*78	75 31 46 95	2188	43, 45
Mehidpur Bungalow	Indore State	Colonel Sandys' bungalow at the N.W. corner of the town on the bank of the Sipra river: Indore Political Agency. 1843.	23 29 31	75 41 29	•••	***

^{*} See description of this station.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Structure	No el Triangle
Mebidpur Fing-staff	Indore State	At the N.W. corner of the town, and near the F. bank o the Sipra river: Indore Political Agency. 1848.	23 29 48.6	75 41 38 6	feet	76.
Mehidpur Jail	,,	W. of the town, and about 1 n mile E. of the Sipre river: Indere Political Agency. 1848.	23 29 22	75 41 37		
Mohidpur s	33	On the Kotwa's Chabutra in the town: Indore Politica Agency. 1849.	23 29 18 98	75 41 50 75	•••	75
Mehidpur Tomb	39	Gudar Shah's tomb at the N.W. corner of a small flat-top ped hill S.E. of the town: Indere Political Agency 1848.	23 28 57 7	75 42 8 9		7 () 77 () 85 ()
Mehon Hill Pagoda Mayhoon H. Pag. s.	Nizam's Territory	About a mile S.W. of the village of that name, and a miles E.S.E. of Soigaon on the road from Aurangabad	20 21 39	75 ‡4 53	poph Poph Marian	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
	Y	to Bhál. 1846.			in an	زدار) از ا
Mhow Church s	Indore State	On the steeple of the church in the town, about a mile W. by N. of the Railway Station: Indere Political Agency. 1847.	22 33 35 90	75 48 7.57	[1924]	118 114
Mitmita Peak	. Nizam's Territory	Southern brow of the table land from which Daulatabad hill fort is detached, about 11 miles N. of the village of that name on the road from Aurangabad to Daulatabad, and 3 miles E.S.E. of the latter town 1845.	}	75 18 22		236
Moda h.s.	35	On a hill, about 2 miles E.S.E. of the large village of that name, 3 miles N.W. by N. of Sillöd on the road from Aurangabad to Ajanta, and 15 miles S.S.W. of the latter. 1846.	1	75 40 6 39	e ee e	200 201
Manipa VIV	Dhár State	Fide page 6_G	22 22 44 21	75.21 38.57	2464	18
Mograba, XIV						7.70
Mohári Hill Peak Lak pk.	Khundesh	Highest point of a hill close to the village of that name, about 31 miles N. of the road from Shendurni to Páchora, and 64 miles E.N.E. of the latter: táluka Páchora. 1816.	1	75 30 44		159
Mohári h.z.	# 4	Near the village of that name, 34 miles N. of the road from Shendurni to Pachora, and 63 miles E.N.E. of the latter: teluka Pachora. 1346.	20 43 57 24	75 31 15 28		157 158
Lali Sin.	Mandenbr	at the SE and of a low flat hill adjoining the hamlet	24 5 17	75 411	[1538]	, , , , , , , , , , , , , , , , , , ,
Multangura Hill Tree	Biate	of Bhimlet, about 14 miles S.S.E. of Multinpurn, the same distance W. of the Rajputana-Malwa Railway Liue, 14 miles N.W. of Mandsaur, and 14 miles N.E. of Beyoli village at the junction of the cart reads from Mandsaur and Botalgoni's Western Malwa Agency. 1847-48.				
Mundradi Pesh Mondwari ph	Niram's	About 2 miles W. of the rillage of that name, 7 miles W. by N. of Kanad town, and 10 miles S. of Challe- gaon. 1816.	20 17 4	75 4 30		218

Name of Station or Point	District	Description	Latitude North	Longitude East of Greanwich	Height of Station Height of Structure	No. of Trinngle
Muramba h.s	Nizam's Territory	This was originally a station of the Hyderabad Topographical Survey, and is on a conical hill, about 11 miles S.E. of the village of Muramba on the high road from Aurangabad to Akola, 21 miles S. by W. of Ladsangvi town, and 2 miles W. of Daragaon. 1845.	0 1 19 56 15.18	。 , , ,, 75 3 8 47·73	feet 	23S 239
Nágápur Hill Mosque	. , ,,	About a mila W. of the village of that name, close N. of Ambagaon, 61 miles E. by S. of Soigaon on the road from Aurangabad to Bhál. 1846.	20 23 28	75 18 16	•••	•••
Nagda Hill	Dewás State	The point is towards the northern end of a flat-topped hill, about a mile S. of Nagda village, 42 miles S. by W. of tha Dowas town, and 22 miles S.E. of Rasulpur village on the high road from Bombay to Agra: Indoro Political Agency. 1847.	22 53 51	76 5 0	[2216]	105
Nagora s ,.	Dhár State	This station was originally fixed by the secondary triangulation of the Bhopal and Malwa Topographical Survey, and is about 14 miles N.W. of tha village of the same name, 14 miles N.E. of Palwara, and 44 miles in the same direction of Makni village on the high road from Rutlam to Indore: Bheel Agency. The station consists of a mud platform 5 feet 9 inches above ground lovel with a mark-stone in its upper surface. 1882-83.	22 49 31 45	75 23 6.03	1784 5·8	94, 95
Naktimáta Peak Bomaldeo	. Barwāni State	About 2½ miles S.S.W. of the village of that name, 2½ miles S. of Sustikhera, and 3½ miles S. by W. of Monimata on the road from Rajpur to Pansemal: pargana Páti. Deputy Bheel Agency. 1847.	21 46 31	74 54 32	[2274]	137
Núlchha Hìll Dargah	Dhár Stato	On a small isolated hill locally known as Telantokri, about ½ n mile S. of Nálchha town, and immediately E. of the road from Nálchha to Mándogarh: táluka Nálchha. Bluel Agency. 1847.	22 24 38 3	75 27 0.5	[2275]	124 125
Nandi Hill Peak	Nizam's Territary	Of an isolated hill, about a mile S. of the village of that name, close to the road from Maldi village to Rehillagad, and 2½ miles N.N.W. of Ambad town. 1845-46.	19 39 33	75 46 22	•••	301 302
Nandkhed Hill Tomb .	u	About \(\frac{1}{2} \) a mile N.E. of the village so called, 5 miles N. of Ladsaugri on the high read from Aurangabad to Akola, and 7 miles W. of Dhabadi on the same read. 1845-46.		75 39 22 7	•••	241 242
Nenod Hill Tree Nenoond h. trees	Indore State	Clump of trees on the northern and higher of two summits of a hill, about 200 yards W. of the road from Indore to Depálpur, about 14 miles N. of Nenad village, and 5 miles N.W. of Indore city: pargana Samer. Indora Political Agency. 1847.	22 44 42	75 48 54	[1986]	101
Netjai Hill	. Ahmednagu	A conspicuous hill close S.W. of a similar hill on which the following station is situated: táluka Shergaon. 1845-46.	19 647	75 921	•••	352
Netjai h.s		On a ruined templa about 2½ miles N.W. of Månekdåndi village, 2½ miles E.N.E. of Såvargaon, and 6 miles S.E. by S. of the largo villago of Tisgaon: täluka Shevgaon. 1845-46.	19 6 54.09	75 9 26 25	•••	314 315
Nigrun, III	Jaora State		23 45 59 27	75 27 25 29	1587	4

Name of Station or Point	•	District	Description	Latitudo North	Longitude LEast of Greenwich	Height of Structure	No.of Triangle
Nimbgaon Pagoda	•••	Ahmedmagar	Largo double domed pageda in the village of that nome, obout 5 miles E. by S. of Shergnen town on the rood from Paithau, and a mile E.N.E. of Målegaen: táluka Shergaen. 1845.	1	0 , " 75 20 47 7 .	feet	331
Nimbgaon Tower	•••	ú	In the village of that name on the road to Shaharaldi, and about 11 miles N.E. of it: taluke Nevasa. 1845.	19 27 59 6 .	75 13 33:0		327
Nirud Tower Niloor	•••	Nizam's Territory	Northern tower near the vilinge of that name, about 2 miles E. of Boigson on the road from Aurangabad to Ajanta, ond 11 miles W. by S. of Bhokardhon town. 1846.	20 13 19 5	75 39 11 1		205
Páchora h.s		Khaudesh	On a hill, about 3½ miles W. of the town of that name, and the same distance E. of Bhodgaon: táluko Páchera. 1846.	20 41 22*93	75 22 41 60		.178 174
Padmála h.s Powar Thalla stn.		н	Ou a temple on o flat-topped hill, about 51 miles S.E. of the town of Erandol on the high read from Dhulia to Julgaon, 32 miles W. of the large village of Minestad on the left bank of the Girnn river, and 7 miles N. by W. of Maheji Railwey Stotion of the G.I.P. Line: talukn Erandol. 1846.		75 26 14 93		149
Paithan Hill Dargah		Niznnı's Territory	On the right bonk of the Godavari river, the town of Poithan being on the apposite bank. 1845.	19 27 58 4	75 26 1 6	***	
Páldhi h.s		Khåndesh	On a hill, about 2 miles S. by E. of the large village of this name on the metalled read from Erandel to Jalgoon Railway Station of the G. 1. P. Line, and 4 miles N. W. by K. of Shirseli Railway Station; táluka Nasirabed. 1846,	20 58 57 86	75 30 50 49	[946]	147
Pallaskhed Hill Tree		Niznm's Territory	Largest and most conspicuous of several trees on a hill, about 3 miles E.S.E. of the village of that name at the trijunction of the roads from Juffrabad, Loneguon and Babulgnon, 8 miles S.S.W. of Jaffrabad, and 5 miles N. by E. of Dongaon. 1816.		75 59 36		248
Palsi h.s	•••	n ·	On a conical hill, about 13 miles S. of the village of that name, 4 miles N.N.W. of Boigaon on the road from Aurangobad to Ajanta, and 53 miles W. of Chintashaida on the same road. 1846.	1	75 35 45 16	•••	197
Pan Chandra Hill Dipmal Shendra H. Dip.		Ħ	White dipmal near the rillage of that name, about 3 miles N. of Jahm, the same distance E. of Rajvadi, and 34 miles W. by S. of Davalgaon. 1845.	19 53 46 6	75 57 33 7	***	25
Paucher Hill Pagoda		Rutlam State	White pageda on a low isolated hill, about a mile S.E. by S. of the small town of Pancher, and i a mile E. of the cart road from Pancher to Rutlam: Western Malwa Agency. 1848.	23 26 16.6	75 352.1		81
Párgaon Tower		Nirnm's Territory	In the village of this name near the head of the Kina stream, about 11 miles N. by W. of Malagaon, and 11 miles S.E. of Nagalvadi. 1845.	1912 6.5	75 28 2 8	· · ·	347

Name of Station or Point	Plotzict	Description	Latitude North	Longitude East of Greenwich	Height of Station Height of Structure	
Párlia hæ	Ji allawar State	On a law hill, about a mile R. by R. of the village of that rance on the east road from Shan an to Mohitput, and the same distance S. by W. of Amiakhera village on the real from Shaman to Gangran Harmatee Agency. 1847-49.	5 / // 23 55 24'41	% , ,, 75 35 36·44	feet [1529]	53, 51
Parnaji Pagoda No. 1	Vjjsin State	At the M. and of the village so called, and i a mile S.E. by S. of Parnatheri village on the real from the town of Pariada to that of Kh&brauda Western Malwa Agency. 1849.	23 30 25 1	75 19 32 7		72
Parnaji Pagoda No. 2	··· »	About 10) yards W. by S. of the parode described above. 1989.	23 30 24·7	75 19 19'9		78
Parnakheri he		This station was originally fixed by the econflary tri- angulation of the lilegal and Malwa Topographical Survey, as discussmall is listed hill, after the ele- ENE of Parakheri village, as 12 miles 8 8 F of the from of Itarialas Western Malwa Agency. The sta- tion was fixed to consist of a platform of earth at of store about 5 feet high with a marketone in its upper autico. 150424.		75 19 22179	167 <u>8</u> 5	70,71
Plener Towns	Historia Ferritory	S. of the rillers so called on the real from Allea to Arthof, about I will be N. of the latter place, as I II will I of Malle villers on the real from Ambad to Hosbargarm. 1843.	1	75 49 43 5	***	301
Farela Idgah Merola Idja	***	Near the either executed on the real from Authorshid to Past any about a mile N. of Huir Kinga montherame real, and 12 miles B. of Authorshid. 1845.	19 42 46.2	75 =0 35'1	•••	277
Perundi Hill Pegods	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	On a compliance bill, about 2 miles N. of the village of that pane on the road from Chicks Haddel to Topyah, the former place being on the read from Articles Bill Elopain, and 2 miles S.R. of Kasaner large sullage on the latter road. This,		75 32 2017		250 251
Pátab h*	a Dowle Fiate	This station was originally fixed by the somedary tri- angulation of the 1th got and Malwa Topographical florray, and is on the lighest point of a group of hills lying 5 miles. W. of Hallinkorn village on the night land of the bigranism, and the iles W.N.W. of the silege of Palani Indee Political Agency. The station consists of a flatform of Ione she hand earth 64 feet Light with a mark-stone in the centre. 1882-83.		75 35 17 65	1006	60, 61
Păthardi Hill Tree	Alumdays	In the town of this name on the Chandni streams thinks Shergson. 1845.	19 10 17	75 13 7		
Pimpri e		About 14 miles 6, by E. of the tillage of that name, I rule E. of Palharrel alilage, and 24 miles W.S.W. of the large village of Phalganns täluka Neväsa, 1445	1	75 10 53 '01		#20 #21

Name of Station or Point	District	Description	Latitudo	Longitude East of	Height of Stalion	No. of
			North	Greenwich	Height of Structure	Triangle
Pingrála Hill Pagoda Pinglara h. pag.	Mandsaur Stato	On the southern of the two small isolated hills lying nearly N. and S. and named after the yillingo which lies at the western base of the northern hill, about 21 miles N.W. of Dhodhar Railway Slation on the Raiputana-Malwa Lino: Western Malwa Agency. 1848.		75, 6.48.7	feet . [1733]	(1) (6) (2) (2) (3) (4) (4)
Pipalgaon Hill Tree Chitti Pimpalgaon	Nizam's Territory	Clump of trees on a hill, about 1‡ miles N.W. of the village so called, a little to the E. of the road from Aurangabad to Patoda, and 10 miles S.E. of Aurangabad. 1845.	1	75 29 59		262 263
Pipla Hill Pagoda		About 2 miles S.S.W. of the village so called on the road to Umred, 14 miles N.N.E. of Thouhla, and the same distance W. of Gundavádi rillage. 1845.	19 10 40 9	75 37 10.8		310
Pokri Tower	11	N. tower close to the village of the same name, about 14-miles E. of Sirádhön village on the read from Ambad to Budnapur lown, 3 miles S.S.E. of Karjii village on the same read, and 4 miles N. of Ambad. 1845.	19 40 44 7	75 48 47 5	÷	297 298
Pophla, XXVIII	31	Fide page 9—g.	20 2 20 80	75 30 33 31	2818 1 3	87
Rail h.s Rail s.	••• In	On a temple on an isolated, conical hill, about 2 miles W. by S. of the village of that name, and 4 miles in the same direction of Kanad town. 1846.	20 14 14 74	75 640.94		210 211
Rájur, XXIX	n	Tide pago 9_g	20 3.43 04	75 53 34 58.	2125 20:3	33
Rájur Hill Templo	31	Most claborately carved stone building about 50 feet in height, having two tiers of pillars above its base which is 13\frac{1}{2} feet high, standing about 70 feet S.E. of the principal station of the same name described on page 9-6. 1845.		75 53 34 9		219
Rakshasbáhan s <i>Rakshasbowan Idga</i>	31	Oo a pagoda close W, of the village of that name on the right bank of the Godarari river and on the road from Gevrai town, and 44 miles K.N.W. of Dundri large village on the same road. The station is marked on the Pagoda 40 feet from its centre and 12 feet from its S.W. corner. 1845.		75 40 37:47		310
Rúla Mandíl Hill Peak Moondla II. Pt.	Indore Sta	e Of a large hill, about 14 miles E. of the village of that name, 6 miles S.S.E. of the Indore city, and 24 miles E. of the read from Indore to Khandwa: Indore Political Agency. 1847.	22 38 44	75 57 50	[2567]	108
Ranigaon h.s	Ahmednag	E. by S. of the village of that name, the same distance N.N.V. of Golegaen, and 5 miles S.W. by S. of the large village of Bodhegaen about a mile. W. of the road from Pátoda to Paithan: talula Shevgaen. The station is denoted by a pillar of stone masonry, 4 feet in dismeter; surrounded by a platform of loose	19 15 10 38	75 26 39 04		329 330
Rasulpur ha	Nizam's	on the table land, about 1 a mile W. of the village so called, 21 miles N.E. of Danlafabad, and the same distance E. of Kangaswari on the road from Auranga-	1958 8 03	75 17 14 74		231 232
		bad to Ellera. 1845-46.	Wester of			,

Name of Station or Point	District	- Description	Latitudo North	Longitudo East of Greenwich	Height of Station Height of Structure	1 -10.01
Raugaon Hill Pagoda .	Nizam's Territory	About a mile N.N.E. of the village so called, 5 miles S. by E. of Jálna town, 2 miles N.W. of Vádagaen on the read from Jálna to Gunsángri, and the same distance S.W. of Sarrádi on the high read from Jálna to Ranjani. 1845.	0 , " 19 46 29°6	0 1 " 75 57 2 7 5	feet 	291 292
Reuti h.s	Indore State	On a Buddhist temple situated on a hill, about 4 mile S.E. of the village of the same name, 6 miles E. by N. of the large village of llated on the main road from Neemuch to Indore. The Holkar State Railway is 14 miles W. of the station: Indore Political Agency. 1847.	22 48 22 90	75 52 54*56	[2082]	100
Rohillagad Hill Peak	Niram's Territory	About † a mile S. of the village so called on the road from Ambad to Yekthun, 2 miles N.W. of Kingaon on the same read, and 4 miles S.E. of Yekthun. 1615.	19 41 49	75 42 24	•••	282
Röza h.s		On the S.W. corner of the Masjid on a hill, about \(\frac{1}{4}\) a mile N.W. of the town of that name, and 1\(\frac{1}{4}\) miles S.E. of Ellora on the road to Daulatabad. 1545-46.	20 040.30	75 13 29*35	•••	233 231
Rui Pagoda	•• n	Close to the village so called on the road from Dadagaen to Chincholi, about 31 miles from Bachagaen on the same read, and 2 miles N. by W. of Bauldi village, 1815.	19 29 40.0	75 53 46 • 5	•••	305
Sámner lis Somenair Stn.	Khándesh	On the south-eastern point of a small group of hills, about a mile N.E. of the village of this name, the same distance S.S.I. of Pathri, and 4½ miles in the same direction of Massavad Railway Station of the G.I.P. Line: taluka Nasirabad. 1846.	20 48 38 31	75 30 56 25	[1012]	151
Sarola h.e	Nizam's Territory	This was originally a station of the Hyderabad Topographical Survey, about 14 miles W.S.W. of Sarola village, 4 miles S. of Golagaon Buzung on the read from Aurangabad to Ajanta, Gmiles S.S.W. of the latter, and 9 miles N.N.W. of Bhokardhan town. 1816.	2023 7.84	75 45 51 - 82	***	198 199
Satára No. 1 h.s.	"	This was originally a station of the Hyderabad Inpo- praphical burrey, and is on the same table-land as the following station. 1855-46.	19 48 38 73	75 20 51 94	•••	261
Satárs No. 2 h.e.	., и	On the N.W. brow of the plaleau, about 2 miles 8.8.W. of Satéra town, and 1 mile E. by N. of Nalchelrawari village on the road from Aurangabad to Paithan. 1845.	1949 5'11	75 20 39°So	•••	265
Sátmála, XXVII	n n	Tide page 0_a,	20 20 13 97	75 9 49°65	2.0 3003	35,36
Sútpuda Hill Peak Nimbrascun	Rhándesh	A prominent point of the Sátpuda range, about 5 miles E. of the ruins of Gauligad: táluka Sárda. 1816-17.	21 19 5	75 40 34	[3523]	145 146

Name of Station or Point	ı	District	'Description	Latitudo North	Longitudo East of Greenwich	Height of Station Height of Structure	No. of Triangle
Savangi h.s Masasa h. stn.	K1	iándesh	Close to the village of that name, about 2 miles N. of the read from Pachers to Shendurni, 7½ miles E. by N. of the former, and the same distance W.S.W. of Lohara town: taluka Pachera. 1846.	20 42 31 51	75 32 51 38	feet	180 181
Sawargaon Pagoda Sowlisar		izam's erritory	Close S. of the village so called, about 1 of a mile E. of Saulesvar village on the right bank of the Goddwari river, and 3 miles N.N.E. of Dundri village on the road from Gevrai town. 1845.	19 21 15.1	75 44 36 0		311
Semlia s	Dh	ár Stato	On a strip of waste land, about 1½ miles 8. of the village of that name, 2½ miles N.W. by N. of Kanwan town, 3½ miles E.N.E. of Kod, and ½ a mile W. of the high road from Rutlan to Indore: Bheel Agency. The station consists of a platform of earth enclosing a circular, perforated pillar of masonry, 2½ feet in diameter and 5 feet in height, with an aperture on the 8, side giving access to the mark-stone at the ground lovel. 1882-83.		75 16 48 15	1774	93
Sovátta Tower Tree Sewta burj		lizam's erritory	Close to the village of that name over looking the left bank of the Godavari river, about 2 of a mile E. by N. of Declana village, 33 miles S.E. by E. of Karegaon, and 23 miles N.E. by E. of Dhaigaon Principal Station. 1845.	19 32 8	75 17 6		326
Shorapur Hill Pagoda Shorapur h. pag.		11	About 2 miles S. of the village so called, the same distance N. by W. of Kalapuri, and 1 mile E. of Jom villege on the road from Manur town. 1845.	19 4 177	75 35 40.8		311
Shorgarh s	Dh	ár State	On a high swell of ground near the western edge of an extensive plateau, about 1½ miles N.W. of the large rillage of that name, 3½ miles S.W. by W. of Kod town, and the same distance W.N.W. of Bidwal town: Bheel Agency. The station is donoted by a mark stone ombedded flush with the ground, laving four other stones around it with marks thereon; the intersection of lines joining them coincides with the station mark. 1852-83.	1	75 10 47 69	1826	97
Shernapur h.s Ohambartaikri s.		izam's erritory	On a hill masjid about a mile S. of the village of that name on the read from Aurangabad to Baizapur, 6 miles W. of Aurangabad, and 1 mile E. of Karadi village. 1845.	19 53 6.20	75 16 30 07		267 263
Shivga Tower Seoga s. burj	.,	33	8. of the village of that name, about 2 miles S.F. of Piperi village on the road from Jalua to Ambad, and 21 miles E.N.E. of Lalvadi village. 1845.	19 40 48 8	75 52 38.4		296
Sillod s Sheloor	•••	я	About 200 yards S. of a Bar tree, 14 miles E.N.E. of place so called ou the road from Aurangabad to Ajanta, and 74 miles W.N.W. of the town of Bhekardhan. 1846.	20 18 49 82	75 43 31 '00	•••	202 203
Sindkhed h.e Gewri pk.			On a hill peak about 11 miles N.W. of the villace so called, 31 miles S. of Gaundgaon, and 6 miles S.W. of the town of Govzái. 1845.	19 13 14 93	75 42 42 95	•••	308

Name of Station or Pol	int	District	Description	Latitudo Nortli	Longitudo East of Greenwich	Height of Station Height of Structure	
Sindphal Hill Pagoda	•••	Nizam's Territory	About 2 miles E. of the large village of that name, and 10 miles W.S.W. of Undangaon. 1846.	0 / " 2025 12·1	0	fcet 	201
Singárchori, XV	***	Mäspur State	Note.—When visited by the Levelling Party in 1853.81, the station was found in good order.	1	75 42 55 62	1.8 2891.10	19
Sirádhön Tower	•••	Niram's Territory	S. of the village so called on the read from Ambad to Reshangaon, about 4 miles N.N.W. of the forner, and 2 miles N. by W. of Maldi village at the junction of the reads from Yekthun and Roshangaon to Ambad. 18t5.	19 40 20.2	75 47 25 5	***	299 300
Sirasgaon Tower	•••	Ahmedusgar	Close E. of the rillage of that name, about 3 miles W. of Khamgaon, 11 miles E. br N. of Ghiregaon, 31 miles N.1: by N. of Gerrii, and 31 miles N. by W. of Pipri Saháli: táluka Netára. 1815.		75 9 15 6	•••	321
Sirjapur Peak Bottaik pt.		Nizam's Territory	About II miles W. by N. of the village so called, 2 miles S.F. of Kolevadi village, and 6 miles W. by S. of Kanad town, 1816.	2014 0	75 5 43	•••	<i></i>
Sireála, XXVI	***	7+	/ Tide pago 8g	20 29 56.24	75 33 36.52	2790	33
Sitamau, I	***	Silamau State	Fide page 4	24 2 6.65	75 22 24 33	15.4	2,3
Sítamau Hill Treo	***	et	On a small hill about a mile S.W. of the town of Sitaman, I of a mile N. of the Laddnía lake, and I mile N. of Dámákheri villago closo W. of the above loke: Western Malwa Agency. 1817-19.		75 23 0	***	52
Sitamau Palaco		11	In the southern quarter of the town, and on the read to the Ladunia lake: Western Malwa Agency. 1817-19.	24 048	75 23 45	•••	
Somtána Hill Dipmal	***	Nizam's Territory	About a mile S.S.W. of the village so called, D1 miles N.N.W. of Hadnapur on the high read to Auranga-bad, and 2 miles W.N.W. of Nikalak on the read from Hadnapur to Kandari Buzurg. 1845.		75 44 2'5	•••	255
Somiána s	,,,	Alimedusgar	On a pagedá about 3 miles W.S.W. of the village of that name on the read from Manur to Shergaon, 4 miles S. by E. of Varur, and the same distance S.E. by E. of the large village of Amrapur on the high read from Ahmednagar to Shergaon: táluka Shorgaon. 1845.		75 16 24 54	•••	332
Songarh Peak '		Dhar State	The highest point of a conical hill at the W. end of the plateau on which is situated the old fortified town of Mandogarly. The read down the ghat to Amlikondal passes 2 of a mile S.E. of the point; Bleel Agency 1817.		75 24 55	[2304]	126 127

^{*} To mark-stone in upper surface of circular pillar.

Name of Station or Point	District	Description	Latitude North	Longitude East of Greenwich	Height of Station Height of Structure	Triangle
Songir h.s Songeer stn.	Khándesh	On n detached hill immediately S. of the town of this name on the high road from Bombay to Agra: tâluka Dhulia. 1846.	21 4 32 54	74 49 30 53	feet [1009]	166
Palváda Hill Pagoda Tharwar H. Pag.	Nizam's Territory	On an isolated, conspicuous hill, about a mile S.W. of the large village so called, 14 miles N. of Rokada vil- lage, and 74 miles N.E. of the town of Gerrái. 1845.		75 53 35 2		307
Fandoli h.s	Ahmednagar	On n hill, about 14 miles E. of the village so called, 24 miles N. of Kanesi, and 44 miles E. by N. of the large village of Koradgaon on the left bank of the Nani stream: taluka Shevgaon. The station is denoted by a mark-stone surrounded by n platform. 1845.		75 24 `0:34	[2143]	318 319
Tarauli h.s	Jhallawar Stato	This station was originally fixed by the secondary triangulation of the Bhopal and Malwa Topographical Survey, and is on one of a group of flat-topped hills lying midway between the Kah Sindh and the Sipra rivers, about 14 miles W. by N. of the rillage of Tarauli, and 14 miles N. by E. of Kitia rillage on the eart road from Sitamun to Mehidpur: Harowtee Agency. The station was found to consist of a very solid stone platform, 34 feet high and 13 feet in diameter, with n mark-stone in its centre: three other stones were embedded around the mark stone for the theodolite stund to rest on. 1882-83.		75 37 37*48	1546 3'8	57,5
farkha h.s	Nizam's Territory	At the northern extremity of the fint portion of n high flat-topped hill, about 1½ miles N.N.E. of Maltinia village from which there is a good road to the station, 2 miles S.E. by E. of Mohori, and 5 miles S.S.E. of Púthardi town. The station is denoted by a circle and dot engraved on the rock in situ. 1893-84.	,	75 15 28 18	2516	350 351
Carla h.s Kutban Stn. Casdin Hill Templo No. 1	Dhár Stnto Holkar's Territory	rillago so called on the high road from Dhar to Amihem, and 21 miles S.W. by W. of the town of Dhar: Bheel Agency. 1847. Large temple on a very high flat-topped hill so called in the Satpuda hills. The road from Chopa to Dhulkot			[2022] [3390]	14
aedin Hill Temple No. 2		passes I mile E. of the bill: pargana Silu. 1847. Small temple about 70 feet S.W. by S. of the preceding temple. 1847.	21 31 17-4	75 25 59 2		14 14
Phíkri, XVII Phíkri IIill Pagoda	Dhár State	Note.—When visited by the Levelling Party in 1883-84, the station was found in good order. A temple on a small isolated hill, about 1 mile N. of the		75 27 17 16 75 26 14 3	854.65 [708]	. 28
2016 A 1150 AM		Bombay Agravord, I a mile N.W. by N. of the village of Thikri, 2 miles S.E. of Gordhanpur village, and 23 miles N.E. of Sinkil Chanki on the high road: Bheel Agency. 1847.			[100]	, , , , , , , , , , , , , , , , , , ,

^{. *} To top of rectangular protecting pillar 3°5 feet high, built over circular pillar.

Name of Station	n or Point	. District	Description	Latitudo North	Longitudo East of Greenwich	Height of Station Height of Structuro	No. of Triangle
Titteroni h.s. Tittarwani stn.	***	Nizam's Territory	On a bill, about 14 miles N.E. of the village so called, 14 miles S. of Tarradgaon, and 4 miles E.N.E. of Mathurri village on the read from Ambah to Borgaon. 1815.	0 / "	0 1 " 75 34 22	feet	•••
Toka h.s.	***	Alımednagar	On a hill pageda in ruins overlooking the right bank of the Goddvari river, about 4 of a mile E. of the read to Aurangabad, and 1 mile in the same direction of Toka village at the confluence of the Pravara and the Goddvari: taluka Nevasa. 1845.	19 37 20.82	7.5 4 18 65	•••	266
Tulvádi h.s. Karjai Stn.	··· ···	Khándesh	On a hill, about 2½ miles S. hy W. of the village of that name, and 4½ miles N.N.E. of Chálisgaon. 1846.	20 30 12	75 5 8	•••	
Undangaon h.s.		Niram's Territory	On the highest point of a hill, about 2 miles W.S.W. of the large village so called, and 8 miles S. of Baital- vádi town. 1846.	20 27 2 20 5	75 41 27 48	•••	192
Undangaon Hill Tr	reo	**	About 120 yards W.N.W. of the preceding station. 1846.	20 27 3	75 41 24	•••	205 206
Unel Hill Tree	•••	Gwalior Stato	On a small isolated hill, about 1 mile 8, of the town of Uncl (Unhal), close E, of the eart road from thence to Garla, and i a mile N. by W. of the small village of Lasulia. 1848.	23 19 19	75 35 49	•••	
Upli Pagoda	··· ·	Nizam's Territory	Near the village of that name on the bank of the Ajna, a tributary of the Puras river, and about 71 miles N.W. of Chiutshaida village on the read from Aurangabad to Ajanta. 1846.	20 19 23°5	75 33 37 8	•••	209
Vádagaon Hill Pag Poonegaon H. Pa		11	Near the village so called on the road from Jálna to Gunsáugri, and about 2 miles S.W. of Hargaon on the high road from Jálna to Raujani. 1845.	19 45 36 . 6	75 58 28.0	•••	293 294
Vaduli Houso Wadola house	*** 5**	Ahmednagar	In the village of that name close 8, of the high read from Ahmedinger to Shevgaon, and about 3 miles W.S.W. of the latter; talka Shevgaon, 1845.	19 20 31	75 13 37		
Vaigaon Hill Tree Nandra H. Tree	•••	Niznm's Territory	On the table-land S.E. of the village of that name, about 2 miles N.R. of Donvada village, and 8 miles N.W. of Ladsingvi on the high road from Aurangabad to Akola. 1845-46.	20 126	75 33 7		
Valvádi, XXIII	···	Kliándesli	Fide page 8.—g	20 44 27 73	75 13 34 30	1127·57 2·0	30
Varad h.ś. Warad	•••	Nizam's Territory	On a peaked hill of the Ajanta range of ghate, about 14 miles N.W. of village so called, 1 mile W. by N. of Satundeh, and 134 miles S. by W. of Pachora town. 1816.	20 29 5 14	75 23 15 66	•••	194
Varjári Hill Wurjarri pt.		, Kliándesli	About ? of a mile W. of the village so called, a mile E.N.I. of Nimjari, and 5? miles N.N.E. of Shirpur town which is 1? miles off the high road from Bombay to Agras taluka Shirpur. 1817.	21 25 43	74 56 51	[1151]	139

^{*} To top of rectangular protecting pillar 2.8 feet high, built over circular pillar.

Name of Station or Point	District	Description '	Latitudo	Longitude East of	Height of Station	No. n
Trans or Branch of 2010			North	Greenwich	Height of Structure	Trîsr
arod h.s	Khándesh	On a small hill near the site of the village of that name,	20 43 0:29	75 15 50 81	feet	17:
Wurow Stn.		and about 41 miles N.W. by W. of the town of Bhad- gaon: taluka Bhadgaon. 1849.				170
arandi h.s Warandi pk. s.	Nizam's Territory	On a hill about a mile N.E. of the rillage of that name, 14 miles S. by E. of Gadadou rillage on the road from	, ,	75 28 26 34	***	274
		Papri to Bhir Kingson, and the same distance N.W. of Kasaner on the road from Bhir Kingson. 1845.				
ási Hill Peak Wassai	"	Close E.S.E. of the village of that name, about 3 miles N.N.E. of the large village of Undangaon, 5 miles W.S.W. of Ajanta town, and the same distance S.E.		75 43 38		19
		by S. of Baitulvádi. 1845-46.			ر د ک در آن	
atli h.s Dowla Hanmani Sin.	Amjhora Stato	On a high hill of that name on tha edge of the Vindbya range, about \(\frac{1}{2}\) a mile S. of Dhamakheri village, and \(\frac{1}{2}\) miles N.W. of Sironj village: Bbeel Agency. 1847.		75 4 9 17	[1800]	11. 12
Vadona Poak	Nizam's Territory	About a mile W. of the village so called close E. of the read from Temberni to Denignon Raja, 4 miles	20 3 46	76 246		21
,, uu pr		N.W. of the latter, and 5 miles S. By E. of the former. 1845.				
Valauj Pagoda Naigaon Pag.	,,	Close to the village of that name on the right bank of the Dudlina river and on the rond from Aurungabud to Ahmedangar, and about 10 miles S.W. of the former. 1845.	19 47 58 3	75 16 4:0		21
Tanana Tili Garat				,		2
Varagaon Hill Tomb .	• 4	White tomb on a hill E, of the rillage of that name, and about 3 miles W. by S. of Pulmari town on the road from Aurangabed to Ajanta. 1846.	20: 4 39*2	75 24 39 9		22
eklorwar Hill Dipmal	n	About a mile N.E. of the village of that name, 31 miles S. by E. of Kurnaud village on the high read from	194911.8	75 36 1.6	•••	- 20
Yeklara dip.	,	Allungubad to Jilan, and 2 miles N.W. of Karrel village on the road from Hadgeon Buzurg to Badnapur. 1845.				
Telli Hill Tree Pimpalgaon Tree	Ahmednagar	hill, about 24 miles 8. E. by E. of the village to called, t	19, 931	75 22 41		
		23 miles W. of Kimrvandi villge, and 13 miles N.N.W. of Timburni; taluka Shorgaon. 1855.				
Terúl, XXX	Nizam's Territory	Vide pago 2-a.	19 58 37 15	75 11 34 13	2050	4
Yerul Hill Tree		Conspicuous Bar tree 140 yards E. of the preceding station of the same name. 1845.	19 58 36	75 11 39	, \	28

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